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Discrimination in Metropolitan Housing Markets: Phase 3 - Native Americans

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DISCRIMINATION



IN METROPOLITAN HOUSING MARKETS:

Phase 3—
Native Americans



U.S. Department of Housing
and Urban Development
Office of Policy Development
and Research

DISCRIMINATION

IN METROPOLITAN HOUSING MARKETS Phase 3

Prepared for:

**Office of Policy Development and Research
U.S. Department of Housing and Urban Development**

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Washington, DC**

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Despite the generous contributions from these individuals and organizations, any errors and omissions that may remain in this report are, of course, our own.

The contents of this report are the views of the contractor and do not necessarily reflect the views or policies of the U.S. Department of Housing and Urban Development or the U.S. Government.

FOREWORD

Ending illegal housing discrimination is one of the highest priorities I have as Secretary of Housing and Urban Development. That is why I am pleased to release the third in a series of reports on the level of housing discrimination in the United States: *Discrimination in Metropolitan Housing Markets: Phase 3 – Native Americans*. This multi-stage study was designed to determine the extent of housing discrimination based on race or color that Americans may face today. By any measure, it is the most ambitious analysis of housing discrimination ever produced. The first two phases of this study reported on the level of discrimination faced by African Americans, Hispanics, and Asians and Pacific Islanders.

This report, the result of comprehensive testing and sophisticated analysis, provides estimate of discrimination encountered by Native Americans searching for housing to rent in Montana and Minnesota, and rent or purchase in New Mexico. The results are based on a sample of 397 paired tests conducted in 2002 in the eight metropolitan areas of the three states.

The research found that the level of discrimination faced by Native Americans in the rental markets of the three states is *greater than* the national levels of housing discrimination experienced by African American, Hispanic, and Asian and Pacific Islander renters. Discrimination is most observable on measures of availability. That is, white testers were significantly more often told an advertised unit was available, told about similar units, and told about more units than similarly qualified Native American testers inquiring about the same advertised unit.

As the Department works to eliminate housing discrimination, this report offers invaluable assistance by documenting where and how discriminatory practices take place. HUD continues to expand efforts to learn more about discrimination, and will continue this report series with one more report: discrimination against persons with disabilities.

The findings will enable HUD to devote more attention, including enforcement that penalizes illegal discrimination, to communities with significant Native American populations. Housing discrimination isn't just unfair, it's against the law.

Mel Martinez
Secretary

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EXECUTIVE SUMMARY

This report presents results from the third phase of the latest national Housing Discrimination Study (HDS2000), sponsored by the Department of Housing and Urban Development (HUD) and conducted by the Urban Institute. It is one of five related reports that will ultimately be produced from this major research effort:

- *Discrimination in Metropolitan Housing Markets: Phase I*
- *Discrimination in Metropolitan Housing Markets: Phase I — Supplement*
- *Discrimination in Metropolitan Housing Markets: Phase II — Asians and Pacific Islanders*
- *Discrimination in Metropolitan Housing Markets: Phase III — Native Americans*
- *Discrimination in Metropolitan Housing Markets: Phase IV — Persons with Disabilities*

All of these reports present findings based upon rigorous paired tests, in which two individuals—one minority and the other white—pose as otherwise identical homeseekers and visit real estate or rental agents to inquire about the availability of advertised housing units. This methodology provides direct evidence of differences in the treatment minorities and whites experience when they search for housing.

Background on HDS2000

Paired testing originated as a tool for fair housing enforcement, detecting and documenting individual instances of discrimination. Since the late 1970s, this methodology has also been used to rigorously measure the prevalence of discrimination across the housing market as a whole. When a large number of consistent and comparable tests are conducted for a representative sample of real estate and rental agents, the results control for differences between white and minority homeseekers, and directly measure patterns of adverse treatment based on a homeseeker's race or ethnicity.

HDS2000 is the third national paired-testing study sponsored by HUD to measure patterns of racial and ethnic discrimination in urban housing markets. Its predecessors, the 1977 Housing Market Practices Study (HMPS) and the 1989 Housing Discrimination Study (HDS) found significant levels of racial and ethnic discrimination in both rental and sales markets of urban areas nationwide. Enforcement tests conducted over the intervening decade have also uncovered countless instances of illegal discrimination against minority homeseekers. Housing discrimination raises the costs of housing search, creates barriers to homeownership and housing choice, and contributes to the perpetuation of racial and ethnic segregation.

HDS2000 will ultimately involve four phases of paired testing. HUD's goals for the study include rigorous measures of change in adverse treatment against blacks and Hispanics nationwide, site-specific estimates of adverse treatment for major metropolitan areas and selected states, and new measures of adverse treatment against Asians and Pacific Islanders, American Indians, and persons with disabilities. Phase I provided national estimates of adverse treatment against blacks and Hispanics and reported on changes in the incidence of differential treatment since 1989. Phase II focused on two major new goals. It produced the first national estimates of discrimination against Asians and Pacific Islanders, and an initial set of state estimates of discrimination against blacks and Hispanics that include small and medium-sized metropolitan areas as well as larger areas. Phase III extends the paired testing methodology to provide the first rigorous estimates of the incidence and forms of discrimination American Indians face when they search for housing in metropolitan areas.

The HDS2000 Methodology

This study builds upon the basic testing protocols that have been implemented in previous national studies and in Phases I and II of HDS2000. Random samples of advertised housing units were drawn from multiple advertising sources in each site on a weekly basis, and testers visited the sampled offices to inquire about the availability of these advertised units. Both minority and white partners were assigned income, assets, and debt levels to make them equally qualified to buy or rent the advertised housing unit. Test partners were also assigned comparable family circumstances, job characteristics, education levels, and housing preferences. They visited sales or rental agents and systematically recorded the information and assistance they received about the advertised unit and/or other similar units, including location, quality and condition, rent or sales price, and other terms and conditions. Test partners did not compare their experiences with one another or record any conclusions about differences in treatment; each simply reported the details of the treatment he or she experienced as an individual homeseeker.¹

The results presented here measure the incidence of discrimination in metropolitan housing markets of three states where substantial numbers of American Indians live in metropolitan areas—Minnesota, Montana, and New Mexico. Because the American Indian population is relatively small and highly concentrated in only a few states, state estimates of discrimination are more useful for policy purposes than a single set of national estimates.

¹ This phase of HDS2000 is designed to measure the extent to which minority homeseekers experience adverse treatment when they look for housing in the states of Minnesota, Montana, and New Mexico. The tests conducted for this study were not designed to assemble evidence of discrimination in individual cases. The question of when differential treatment warrants prosecution and the related question of whether sufficient evidence is available to prevail in court can only be resolved on a case-by-case basis, which might also consider other indicators of treatment than those reported here.

Indian tribes are tremendously diverse, with different languages, cultural traditions, and physical attributes. In the metropolitan areas where HDS testing was conducted, the predominant tribes include Navajo and Pueblo (in New Mexico), Crow, Blackfeet, and Sioux (in Montana), and Chippewa and Sioux (in Minnesota). Testers were recruited to represent the predominant tribes in their states, and included members of all these tribes.² Although rental testing was conducted in all three states, sales testing was conducted only in New Mexico.

Summary of Findings

In the metropolitan housing markets of Minnesota, Montana, and New Mexico, American Indian renters face significant levels of discrimination, primarily due to denial of information about the availability of housing units.

The example on this page is consistent with the pattern that whites are more often told about available housing than are equally qualified American Indians.

Generally, the discrimination encountered is not outright "door slamming," but a pattern of treatment that favors whites and ultimately limits the housing choices and increases the cost of housing search for American Indians. Discrimination against American Indian renters ranges from 25.7 percent in New Mexico to 33.3 percent in Minnesota, averaging 28.5 percent across all three states. These levels of discrimination are high compared to national estimates for African Americans, Hispanics, and

Asians and Pacific Islanders. In all three states, American Indian renters were significantly more likely to be denied information about available housing units than comparable whites. Other forms of adverse treatment were generally not statistically significant.

American Indian homebuyers in New Mexico experience significant levels of geographic steering—with more whites shown homes in neighborhoods that were more predominantly white. However, other forms of adverse treatment were not statistically significant. The overall incidence of discrimination is 16.9 percent. These results should be viewed as preliminary; it

A 43-year old white female tester inquired about a 2-bedroom unit advertised for rent at \$590 in Billings, MT. The agent informed the tester that the unit was available, gave the tester an application form, a brochure, and a business card. The agent then took the tester to inspect two model units that were similar to the advertised unit.

A 37-year old Native American woman, with equivalent economic characteristics to the white tester, inquired about the same 2-bedroom unit the next day. The agent responded that she was too busy to talk, gave the tester an application form, brochure, and business card, and told her to come back on Monday if she wanted to see an apartment. The agent did not indicate whether or not the advertised apartment was still available.

² Most of the American Indian testers who participated in this study spent some part of their lives on Tribal Lands, or have friends and relatives there and maintain a connection to tribal institutions and activities.

would be a mistake to draw conclusions about the overall experience of American Indian homebuyers based upon evidence from a single state.

These findings clearly indicate that discrimination is a serious problem for American Indians searching for housing in metropolitan rental markets, and that rigorous paired testing can and should be expanded for both research and enforcement purposes. However, few local fair housing organizations have strong ties to American Indian communities or experience working with American Indians as testers or test coordinators. Therefore, the recruitment and retention of American Indians as testers present significant challenges. Future testing efforts should consider pairing experienced testing organizations with organizations that have strong ties to American Indian communities, building the capacity of American Indians to coordinate and conduct rigorous paired testing.

Measurement Issues

A paired test can result in any one of three basic outcomes for any measure of treatment: 1) the white tester is favored over the minority; 2) the minority tester is favored over the white; or 3) both testers receive the same treatment (which may be either favorable or unfavorable). The simplest measure of adverse treatment is the share of all tests in which the white tester is favored over the minority. Because there are also tests in which minority testers receive better treatment than their white partners, we report both the incidence of white-favored treatment and the incidence of minority-favored treatment.

Gross and Net Measures. Although these simple *gross measures* of white-favored and minority-favored treatment are straightforward and easily understandable, they almost certainly overstate the frequency of systematic discrimination.³ Specifically, differential treatment may occur during a test not only because of differences in race or ethnicity, but also because of random differences in the circumstances of their visits to the real estate agency. For example, in the time between two testers' visits, an apartment might have been rented, or the agent may have been distracted by personal matters and forgotten about an available unit. Gross measures of white-favored and minority-favored treatment include both random and systematic elements, and therefore provide *upper-bound estimates* of systematic discrimination.⁴

³ We use the term "systematic discrimination" to mean differences in treatment that are attributable to a customer's race or ethnicity, rather than to any other differences in tester characteristics or test circumstances. This term is not the same as "intentional" discrimination, nor is it intended to mean that these differences would necessarily be ruled as violations of federal fair housing law.

⁴ Note that it is conceivable that random factors might *reduce* the observed incidence of white-favored or minority-favored treatment, so that the gross-incidence measure is technically not an absolute upper-bound for systematic discrimination.

One strategy for estimating systematic discrimination, that is, to remove the cases where non-discriminatory random events are responsible for differences in treatment, is to subtract the incidence of minority-favored treatment from the incidence of white-favored treatment to produce a *net measure*. This approach essentially assumes that all cases of minority-favored treatment are attributable to random factors—that systematic discrimination never favors minorities—and that random white-favored treatment occurs just as frequently as random minority-favored treatment. Based on these assumptions, the net measure subtracts differences due to random factors from the total incidence of white-favored treatment. However, it seems possible that sometimes minorities may be systematically favored on the basis of their race or ethnicity. If so, the net measure subtracts not only random differences but some systematic differences, and may therefore understate the frequency of systematic discrimination.⁵

It is possible to adapt the basic paired testing methodology to directly observe how often random differences in treatment occur. Specifically, in two metropolitan areas, Phase II of HDS2000 conducted three-part tests. In these tests, a white tester was followed by two minorities or a minority tester was followed by two whites, all following the same protocols. Comparing the treatment of the two same-race testers provides a direct estimate of random (non race-based) differential treatment. This exploratory triad testing effort suggests that most, if not all, minority-favored treatment is random; it provides no convincing evidence that minority-favored treatment systematically exceeds differences in the treatment of same-race testers. However, because these results are based on a relatively small number of tests in only two metropolitan areas, they should be viewed as preliminary and require further confirmation.

The body of this report presents both gross and net measures, because in combination, they indicate not only how often whites are favored over comparable minority homeseekers, but the extent to which white-favored treatment systematically exceeds minority-favored treatment. These two measures provide upper- and lower-bound estimates of systematic discrimination against minority homeseekers.

Summary Measures. A visit with a rental or sales agent is a complex transaction and may include many forms of favorable or unfavorable treatment. This report presents results for a series of fourteen individual rental treatment indicators and fifteen sales treatment indicators, but also combines these individual indicators to create *composite measures* for categories of treatment (such as housing availability or housing costs) as well as for the transaction as a whole. For rental tests, treatment measures include the availability of advertised and similar

⁵ Even when no statistical pattern of race-based differential treatment is observed, individual cases of discrimination may occur. Specifically, even if the net measure is not significantly different zero, there may in fact be instances of race-based discrimination, although the overall pattern does not systematically favor one group over the other.

units, opportunities to inspect units, housing costs, and the encouragement and assistance from rental agents. For sales tests, measures include the availability of advertised and similar homes, opportunities to inspect homes, the neighborhood characteristics of recommended and inspected homes, assistance with mortgage financing, and encouragement and assistance from the sales agent.

Two types of composite measures have been constructed. *Consistency measures* reflect the extent to which the different forms of treatment that occur in a visit consistently favor one tester over the other. Specifically, tests are classified as white-favored if the white tester received favorable treatment on one or more individual items, while his or her partner received *no* favorable treatment. Tests were classified as “neutral” if one tester was favored on some individual treatment items and his or her partner was favored on even one item. Consistency measures were used in 1989 to summarize testing results across individual treatment indicators. In HDS2000, however, we also developed *hierarchical measures* by considering the relative importance of individual treatment measures to determine whether one tester was favored over the other. For each category of treatment measures and for the full set of measures, a hierarchy of importance was established *independently* of the testing results to provide an objective set of decision rules for comparing treatment across indicators.⁶

The body of this report presents both consistency measures and hierarchical measures. These alternative measures (including both lower-bound and upper-bound estimates of systematic discrimination) generally tell a consistent story about the existence of discrimination at the state level.

Strengths and Limitations of This Research

Paired testing is a powerful tool for directly observing differences in the treatment that minority and white homeseekers experience when they inquire about the availability of advertised housing units. Despite the strengths of this methodology, HDS2000, like previous paired testing studies, is limited in its coverage of metropolitan housing markets and the experience of minority homeseekers. The sample of real estate and rental agents to be tested was drawn from publicly available advertisements, and the economic characteristics of tester teams were matched to the characteristics of the advertised units. However, not all housing units for sale or rent are advertised, not all real estate and rental agents use advertising to attract customers, and not all homeseekers rely upon published advertisements in their housing search. Therefore, results presented here do not necessarily reflect the experience of the

⁶ Again, it is important to emphasize the difference between methods used for the statistical analysis of paired testing results and methods used to assemble or assess evidence of unlawful conduct in an individual case. No pre-determined set of decision criteria can substitute for case-by-case judgements about test results.

typical American Indian homeseeker, but rather of homeseekers qualified to rent or buy the average housing unit advertised in a readily available information source.

Moreover, the results presented here do not encompass all phases of the housing market transaction. HDS2000, like most paired testing studies, focuses on the initial encounter between a homeseeker and a rental or sales agent. Additional incidents of adverse treatment may occur later in the housing transaction, when a renter submits an application or negotiates lease terms, or when a homebuyer makes an offer on a particular unit or applies for mortgage financing. In spite of these important limitations, Phase III of HDS2000 provides compelling evidence that American Indians face high levels of discrimination in metropolitan housing markets, particularly when they search for rental housing.

1. BACKGROUND AND INTRODUCTION

This report presents findings from the third phase of the latest national Housing Discrimination Study (HDS2000), sponsored by the Department of Housing and Urban Development (HUD) and conducted by the Urban Institute. HDS2000 is the third national paired-testing study sponsored by HUD to measure patterns of racial and ethnic discrimination in U.S. housing markets. The first phase of HDS2000 rigorously measured current levels of adverse treatment against African Americans and Hispanics for large metropolitan areas nationwide and tracked significant changes in these levels since 1989. It concluded that discrimination still persists in both rental and sales markets of large metropolitan areas nationwide, but that its incidence has generally declined since 1989.¹ Phase II produced the first national estimates of discrimination against Asians and Pacific Islanders, finding that they also face significant levels of housing discrimination, particularly in the homeownership market.²

Phase III of HDS2000 provides the first rigorous estimates of the incidence of discrimination experienced by American Indians when they search for housing in metropolitan areas outside of Native Lands. These estimates focus on three states—Minnesota, Montana, and New Mexico—each of which has a substantial population of American Indians living in metropolitan areas. Testing focused on discrimination in metropolitan rental markets for all three states, with additional testing for metropolitan sales markets in New Mexico.

Paired Testing Methodology

In a paired test, two individuals—one minority and the other white—pose as otherwise identical homeseekers, with comparable housing needs and resources. Both testers visit a real estate or rental agent to inquire about the availability of housing, making the same requests and providing the same information about themselves. Each tester systematically records the information and assistance he or she receives from the agent. If the minority and white are treated differently in important ways, the test provides direct and powerful evidence of differences in the treatment minorities and whites experience when they search for housing.

¹ See M.A. Turner, S. Ross, G. Galster, J. Yinger (2002) *Discrimination in Metropolitan Housing Markets: National Results from Phase I of HDS2000*. Washington, D.C.: U.S. Department of Housing and Urban Development.

² See M.A. Turner and S. Ross (2003) *Discrimination Against Asians and Pacific Islanders in Metropolitan Housing Markets*. Washington, D.C.: U.S. Department of Housing and Urban Development. In addition, Phase II produced four sets of state-wide estimates of discrimination against African Americans and Hispanics, and expanded the sample of metropolitan areas in the national estimates. See M.A. Turner and S. Ross (2003) *Discrimination Against African Americans and Hispanics: Supplemental Results from Phase II of HDS2000*. Washington, D.C.: U.S. Department of Housing and Urban Development.

Paired testing originated as a tool for fair housing enforcement, detecting and documenting individual instances of discrimination. Since the late 1970s, this methodology has also been used to rigorously measure the prevalence of discrimination across the housing market as a whole. When a large number of consistent and comparable tests are conducted for a representative sample of real estate and rental agents, the results directly measure patterns of adverse treatment based on a homeseeker's race or ethnicity.

For the results presented here, basic testing protocols replicated those implemented in Phase II of HDS2000. Samples of available housing units were drawn from multiple advertising sources, including major metropolitan newspapers, community newspapers, homeseeker guides, and the internet. Testers visited the sampled offices to inquire about the availability of these units. Both minority and white partners were assigned income, assets, and debt levels to make them equally qualified to buy or rent the advertised housing unit. Test partners were also assigned comparable family circumstances, job characteristics, education levels, and housing preferences. They took turns visiting sales or rental agents and systematically recorded the information and assistance they received about the advertised unit and/or other similar units, including location, quality and condition, rent or sales price, and other terms and conditions. Test partners did not compare their experiences with one another or record any conclusions about differences in treatment; each simply reported the details of the treatment he or she experienced as an individual homeseeker.³

HDS2000 Study Scope

HDS2000 will ultimately involve four phases of paired testing. HUD's goals for the study include rigorous measures of change in adverse treatment against blacks and Hispanics nationwide, site-specific estimates of adverse treatment for major metropolitan areas, statewide estimates of adverse treatment that encompass smaller metropolitan areas, and new measures of adverse treatment against Asians and Pacific Islanders, American Indians, and persons with disabilities.

Phase III of HDS2000 was designed to yield three sets of state estimates of discrimination against American Indians, based on testing in eight metro areas with substantial concentrations of American Indian population. Specifically, estimates of discrimination against American Indian renters were produced for Minnesota (based on testing in Minneapolis-St. Paul and Duluth), Montana (based on testing in Billings, Great Falls, and Missoula), and New Mexico

³ HDS2000 is designed to measure the extent to which minority homeseekers experience adverse treatment when they look for housing in metropolitan areas. The tests conducted for this study were not designed to assemble evidence of discrimination in individual cases. The question of when differential treatment warrants prosecution and the related question of whether sufficient evidence is available to prevail in court can only be resolved on a case-by-case basis.

(based on testing in Albuquerque, Santa Fe, and Las Cruces). Estimates of discrimination against American Indian homebuyers were produced only for New Mexico (based on testing in Albuquerque, Santa Fe, and Las Cruces). Each set of statewide estimates is representative of the levels of discrimination faced by American Indians searching for housing in metropolitan areas throughout the state.

HDS2000, like previous national paired testing studies, is limited in its coverage of metropolitan housing markets and the experience of minority homeseekers. The sample of real estate and rental agents to be tested was drawn from published advertisements, and the economic characteristics of tester teams were matched to the characteristics of the advertised units. However, not all housing units for sale or rent are advertised, not all real estate and rental agents use advertising to attract customers, and not all homeseekers rely upon advertisements in their housing search. Therefore, results presented here do not necessarily reflect the experience of the typical American Indian homeseeker, but rather of homeseekers qualified to rent or buy the average housing unit advertised in a publicly available information source.

Moreover, the results presented here do not encompass all phases of the housing market transaction. HDS2000, like most paired testing studies, focuses on the initial encounter between a homeseeker and a rental or sales agent. Additional incidents of adverse treatment may occur later in the housing transaction, when a renter submits an application or negotiates lease terms, or when a homebuyer makes an offer on a particular unit or applies for mortgage financing. Despite these limitations, Phase III of HDS2000 constitutes the first effort to systematically measure housing discrimination against American Indians, and provides the most rigorous estimates of the level and forms of discrimination that American Indians face when they search for housing in metropolitan markets.

Organization of the Report

The remainder of this report consists of three chapters. Chapter 2 presents the methodology implemented in Phase III of HDS2000, including the samples of metropolitan areas in which tests were conducted, the procedures used to draw samples of available housing units in each of these metropolitan areas, the testing protocols implemented for both rental and sales housing, and the statistical procedures used to estimate the incidence of adverse treatment. Chapter 3 presents state-level estimates of adverse treatment against American Indians, incorporating both large and smaller metropolitan areas. Chapter 4 discusses the implications of this pilot effort for further research testing focusing on discrimination against American Indians.

2. PHASE III DESIGN AND METHODOLOGY

Although the paired testing methodology originated as a tool for fair housing enforcement, it has been successfully adapted for research purposes. In order to yield reliable measures of differential treatment in housing market transactions, paired testing must be applied to a representative sample of housing providers or available housing units in selected markets, and must adhere to highly standardized protocols. Phase III of HDS2000 built upon the experience of two previous phases to produce the first statistically rigorous measures of levels and forms of adverse treatment against American Indians searching for housing in metropolitan areas. This chapter describes the sampling procedures, testing protocols, and analysis techniques implemented in Phase III of HDS2000.

Sampling

The population of American Indians living in metropolitan areas is quite highly concentrated in a few states. Therefore, national estimates of housing discrimination against American Indians might not be as meaningful or useful for policy purposes as state estimates.¹ Moreover, exploratory work conducted during Phase I of HDS2000 indicated that testing for discrimination against American Indians could be particularly challenging, primarily because few local fair housing organizations have experience working with American Indians. Therefore, Phase III focused the available testing resources in three states with significant American Indian populations, producing representative estimates for the metropolitan markets within each state. More specifically, for each state, sampling was based on an *integrated two-stage design*. In the first stage, metropolitan areas were selected with certainty to provide maximum coverage of the American Indian population within a state's metropolitan areas. In the second stage, advertisements for rental and sales housing were selected with probability sampling from multiple advertising sources covering the sampled metropolitan markets during the testing period.

State Samples of Metropolitan Populations. Phase III of HDS2000 features an initial set of state-level estimates for differential treatment of American Indians in metropolitan housing markets where American Indians represent a significant proportion of the population. First, we used 2000 Census Data to identify states in which the American Indian population exceeds 50,000 and accounts for more than 1 percent of total population. These states include Alaska, New Mexico, South Dakota, Oklahoma, Montana, Arizona, Washington, North Carolina, Minnesota, and California. Then, in consultation with HUD, we selected three of these states—

¹ It is also important to note that the characteristics and housing circumstances of American Indians vary tremendously across states, metropolitan areas, and between Tribal Lands and non-tribal communities. See Kingsley, Mikelsons, and Herbig (1996).

Minnesota, Montana, and New Mexico—taking into consideration the capacity of local fair housing or other organizations to conduct large numbers of standardized paired tests. In each state, we then selected either two or three metropolitan areas that account for at least 90 percent of the state’s metropolitan American Indian population. For Montana and New Mexico, testing was conducted in three metro areas, while only two metro areas were required to produce representative estimates for Minnesota. Exhibit 2-1 summarizes the final site selection with the resulting coverage of each state’s total metropolitan American Indian population.

Exhibit 2-1: States and Metropolitan Areas Selected for American Indian Testing

STATE/MSA	AMERICAN INDIAN POP. (2000 CENSUS)	% AMERICAN INDIAN POP. IN ALL MSAs
MINNESOTA		--
DULUTH	4,860	15.5
MINNEAPOLIS-ST. PAUL*	21,326	81.3
SAMPLED MSA POPULATION*	26,508	96.8%
MONTANA		--
BILLINGS	3,950	41.4
GREAT FALLS	3,394	35.6
MISSOULA	2,193	23.0
SAMPLED MSA POPULATION	9,537	100.0%
NEW MEXICO		--
ALBUQUERQUE	39,992	85.7
LAS CRUCES	2,580	5.5
SANTA FE	4,089	8.8
SAMPLED MSA POPULATION	46,661	100.0%

* When MSA boundaries include portions of two or more states, only the state specific portion of that MSA had testing conducted in it. For instance, Minneapolis-St.Paul MN-WI MSA had testing conducted only in the MN portion of the MSA for Phase III.

We conducted both rental and sales tests in New Mexico, but only rental tests in the other two states. Sales testing is very challenging for inexperienced groups and inexperienced testers to conduct successfully, and given the resources available for Phase III of HDS2000, conducting sufficient numbers of sales tests in all three states would have been prohibitively expensive. Moreover, in most states, homeownership rates are very low among American

Indians (in metropolitan areas), raising the potential for detection of testers. Therefore, we concluded that the most effective use of the available resources would be to produce estimates of discrimination against American Indian renters in three states, while estimates of discrimination against American Indian homebuyers would be produced for only one state. New Mexico was selected for sales testing because it has the largest numbers (and concentrations) of American Indians living in metropolitan areas, as well as the highest homeownership rates among American Indians in metropolitan areas (58.8 percent, compared to 33.9 percent in Montana and 41.5 percent in Minnesota). Thus, we anticipated that the risk of detection would be lowest and the availability of testers with homeownership experience would be greatest in New Mexico.

In order to produce statistically valid estimates, we initially planned to conduct 100 tests per tenure per state, for a total of 400 tests overall. Testing targets were allocated across the sampled metropolitan areas in proportion to the size of their American Indian population. However, the local testing organization in Minnesota encountered difficulties in conducting the necessary number of tests on schedule. As a result, only 50 rental tests were conducted for Minnesota, but the number of rental tests for Montana and New Mexico was increased. Exhibit 2-2 presents the final sample sizes by site for each state. Based upon these sample sizes, we can generally expect to detect net differences in treatment at the state level that exceed 5 to 7 percentage points at a 95 percent confidence level, although the statistical power of individual estimates will vary.

Exhibit 2-2: Final Sample Sizes by Metropolitan Area

MSA / PMSA	# Rental Tests	# Sales Tests
Minnesota	51	0
Minneapolis-St.Paul	42	
Duluth	9	
Montana	121	0
Billings	50	
Great Falls	38	
Missoula	33	
New Mexico	125	100
Albuquerque	105	85
Santa Fe	14	9
Las Cruces	6	6
Total	297	100

In the metropolitan areas where HDS testing was conducted, the predominant tribes include Navajo and Pueblo (in New Mexico), Crow, Blackfeet, and Sioux (in Montana), and Chippewa and Sioux (in Minnesota). Testers were recruited to be as representative as possible of the predominant tribes in their areas. Exhibit 2-3 reports the distribution of completed tests by tribe. Because many testers report membership in more than one tribe, the percentages total to more than 100 percent.

Exhibit 2-3: Distribution of Completed Tests by Tribe

New Mexico Rentals			New Mexico Sales			Montana Rentals			Minnesota Rentals		
Tribal Affiliations	Total Tests	Percent	Tribal Affiliations	Total Tests	Percent	Tribal Affiliations	Total Tests	Percent	Tribal Affiliations	Total Tests	Percent
Navajo	84	67.7%	Navajo	72	72.0%	Blackfeet	25	20.7%	Mississippi Choctaw	9	17.6%
Pueblo	47	37.9%	Pueblo	17	17.0%	Paiute	7	5.8%	Minnesota Chippewa	47	92.2%
Zuni	6	4.8%	Zuni	5	5.0%	Crow	74	61.2%	Shakopee Sioux	4	7.8%
Apache	5	4.0%	Apache	4	4.0%	Winnebago	34	28.1%	Blackfeet	4	7.8%
Cheyenne-Arapaho	6	4.8%	Cheyenne-Arapaho	0	0.0%				Other	12	23.5%
Cherokee	3	2.4%	Cherokee	0	0.0%						
Other/Unknown	6	4.8%	Other/Unknown	4	4.0%						

Sample of Advertised Housing Units. The basic objective of a paired testing study is to observe the relative treatment that housing agents provide to white and minority homeseekers in the private market. Because we are measuring agent behavior, we would ideally draw a representative sample of rental and sales agents, where an agent's probability of selection reflects his or her share of available housing units. In addition, our sampling methodology needs to provide information about the housing being offered by each agent. This information allows both members of a testing team to be assigned characteristics (such as household size and income) and preferences (such as housing type and location) that correspond to housing that an agent actually has to offer.²

The national paired testing studies conducted in prior to HDS2000 relied upon classified advertisements in major metropolitan newspapers to generate samples of rental and sales agents. The Housing Market Practices Study (HMPS, conducted in the late 1970s) drew a single sample of advertisements from the Sunday classified section of each metropolitan area's primary newspaper (Wienk et al., 1979). Tester teams were assigned characteristics and preferences consistent with the sampled housing units, and visited the corresponding agents inquiring generally about available housing. In the 1989 Housing Discrimination Study (HDS), this methodology was refined to involve weekly samples of available housing units, again drawn from the classified advertising sections of each metropolitan area's major newspaper (Turner, Struyk, and Yinger, 1989). This refinement allowed testers to begin each visit by inquiring about a particular housing unit, making the tests more credible and allowing both white and minority

² For a more detailed discussion of sampling principles, see chapter 2 of The Urban Institute (2000) *Research Design and Analysis Plan for Housing Discrimination Study 2000*.

testers to send agents the same implicit signals about housing preferences. Phase I of HDS2000 replicated this approach, drawing weekly samples of advertisements from the Sunday classified section of each metropolitan area's major newspaper. However, relying upon metropolitan newspapers to represent the housing market as a whole has significant weaknesses. Therefore, Phase II of HDS2000 developed procedures for drawing upon multiple advertising sources, in order to more fully reflect the universe of housing units available for rent or sale in the sampled metropolitan areas. These procedures were applied again in Phase III.

The weekly ad-sampling methodology offers several important benefits. It yields a representative sample of housing agents who advertise available units, where an agent's probability of selection is proportionate to his or her share of all units advertised. Because the advertising sources selected for sampling are readily available, regardless of race, ethnicity, or other characteristics, this sampling frame includes agents who can realistically be accessed by any homeseeker. In addition, the weekly sampling methodology provides a consistent and credible starting point for each test, tying the characteristics and preferences of testers to housing actually available from the sampled agent, and sending consistent signals from both members of a tester team. Finally, this methodology addresses one of the major ethical concerns about paired testing—that it imposes an unreasonable cost burden on housing agents who have to spend time responding to testers' inquiries and potentially violates their expectations of privacy regarding these inquiries (Fix and Struyk, 1992). By advertising in a widely available outlet, a housing agent is explicitly inviting inquiries from the general public.

Four basic steps were required to produce samples for each Phase III site:

- Select a set of advertising sources that provides reasonably complete coverage for the metropolitan housing market.
- Develop a schedule for rotating across sources on a weekly basis.
- Establish an efficient sampling protocol for each advertising source.
- Draw weekly ad samples.

Select advertising sources. For each metropolitan area selected for Phase III testing, we assembled an inventory of potential advertising sources. Drawing from media directories, the internet, and local informants, we prepared a list of newspapers, internet sites, and guides that local housing agents use to advertise rental and sales units. Excluded from this inventory were foreign language sources, sources with very small circulation or ad volumes, sources produced by a single real estate or rental company, sources that require the user to specify housing preferences in order to obtain listings, and sources that are not readily available to the general public. Based upon this inventory, we selected a set of sources that provided reasonably complete coverage of rental and/or sales advertisements for the metropolitan housing market as a whole, including rural portions of the market. A different set of sources was typically selected for rental advertising than for sales advertising. One or more major metropolitan dailies were

always included among the selected sources. City and suburban community papers were included if they provided a reasonable volume of advertisements for specific geographic sub-areas. Because local experts in the Phase III sites indicated that relatively few homeseekers use the internet, we used the internet version of a source only for logistical convenience and if it provided the same information as the print version. Finally, we included free apartment-seekers and/or homeseekers guides and advertising circulars if they were available locally. Exhibit 2-4 identifies the actual sources selected for each metro area.

Exhibit 2-4: Phase III Sampling Ad Sources for American Indian Testing Sites

	Major Metro Newspapers	Community Papers	Rental/Sales Guides	Advertising Circulars
MINNESOTA				
Minneapolis-St. Paul	Minneapolis Star Tribune St. Paul Pioneer Press	Anoka Shopper Elk River Star News Shoreview Press Stillwater Gazette City Pages Hastings Star Gazette Waconia Patriot Wright County Journal Press	Apartments for Rent Twincities Apt Living Guide	--
Duluth	Duluth News-Tribune	The Hibbing Daily Tribune The Mesabi Daily News	--	--
MONTANA				
Billings	Billings Gazette	Laurel Outlook	--	Thrifty Nickel Want Ads Yellowstone Shopper
Great Falls	Great Falls Tribune	--	--	Consumer Press
Missoula	Missoulian	Missoula Independent	--	--
NEW MEXICO				
Albuquerque	Albuquerque Journal	The News-Bulletin The Rio Rancho Observer	Apartments for Rent Apartment Guide Albuquerque Homes Illustrated Real Estate Book	Quick Quarter Thrifty Nickel
Santa Fe	Santa Fe New Mexican	Los Alamos Monitor	Apartment Guide Santa Fe Homes Santa Fe Real Estate Guide	Thrifty Nickel Ads
Las Cruces	Las Cruces Sun-News	--	Las Cruces Apartment Guide Real Estate Press	--

Develop a rotational schedule. Once a reasonable set of advertising sources was selected for a metropolitan area, we developed a schedule for rotating across sources on a weekly basis. Our goals in developing this schedule were to minimize the overlap between sources that might be used in the same week, to sample on the most appropriate day of the week for each source, and to ensure an adequate number of advertisements per week. Thus, a source that covered all or most of a metro area (such as a major metro newspaper or a metro-wide internet site) would be the only source utilized in a given week. In contrast, several sources that targeted different geographic sub-areas might be combined in the same week. Finally, sources that were published monthly rather than daily or weekly were generally utilized during the weeks when they were first released.

Establish sampling protocols. For each advertising source to be utilized, we used randomly generated numbers to select a starting point, and then sampled every “ n^{th} ” ad to yield the target sample size. Not all advertised housing units are eligible for inclusion in our sample. Some types of ads are not suitable for our paired testing protocols. For example, subsidized rental housing units must be excluded because they impose specialized income and other eligibility criteria for tenants, and homes for sale by owner are excluded because they do not contribute to the sample of housing *agents* active in the local housing market. Phase III adopted the same eligibility criteria as were implemented in Phase II of HDS2000.³

Draw weekly samples. Once a Phase III site was ready to begin testing, we drew ad samples on a weekly basis, applying the site-specific rotational schedule and sampling protocols outlined above. The weekly samples were two to three times larger than the target number of tests to be conducted in a given week, because some advertisements that appear to be eligible for inclusion in the sample turn out to be ineligible when further information is gathered on site, some advertised housing units are no longer available by the time testers call to schedule a visit, and some providers (particularly owners of small rental properties) were very difficult to reach. Each week we drew roughly equal numbers of ads for a given site. To the greatest extent possible, we combined ad sources so that the ad volume of the frame sets was roughly equal from week to week, making the sampling rates approximately the same. Within a given week, all ad sources had the same sampling rate applied to generate the ads for testing. This means that a proportionate stratified sample was drawn across frame sources in a given week, with each frame source representing a different stratum. Each testing site received one rental sample set and (if applicable) one sales sample set each week, though not always on the same day each week. If a sample proved to be too small for a particular site in a given week, additional sample units were drawn (from the same advertising source if possible) at the request of the testing organization.

Analytic Weights. Analytic weights were generated to produce state estimates for the population of inference, which in HDS2000 comprises the collection of housing agents who interact with American Indian households seeking to purchase or rent a home and who use housing advertisements as their entryway into the housing market. More specifically, we developed a model-based weighting approach that balances the sample by stratum using Census 2000 data. The weights are *model based* in that they rely on a plausible “model” that posits the distribution of housing agents being distributed like population. Specifically, the model assumes that the percentage distribution of minority population across sampling strata reflects the percentage distribution of agents who serve minority homeseekers across those strata.

The methodology for calculating the analytic weights is relatively straightforward. It involves the creation of a two-factor weight:

$$AWT = SWT \times POP_ADJ \quad (1)$$

Where AWT denotes the *analytic weight*, SWT represents the first stage sampling weight, and POP_ADJ represents a *population adjustment* using Census 2000 data (calculated separately for each tenure). The stage-one sampling weight is simply the reciprocal of a site’s selection probability:

$$SWT(i) = 1 \quad (2)$$

since all sites were chosen with certainty. The population adjustments, POP_ADJ, represent enhancements to the sampling weights that align the sample to known Census 2000 population distributions across our sampling strata. Again, since all sites are chosen with certainty, each site forms a stratum. The adjustments simply comprise the ratio of the site’s American Indian population relative to the total American Indian population of all metropolitan areas in the state.

Given the nature of the population of inference, we chose not to incorporate differential weighting associated with weekly fluctuations of tester productivity and ad volume. Similarly, we did not consider the source of the advertisement when developing weights because no information is available concerning the population of available housing stock that is directly and indirectly represented by these sources. Finally, our pooled three-state results are weighted to reflect the relative size of each state’s American Indian population.

³ For a full description of the eligibility criteria, see chapter 2 of M.A. Turner and S. Ross (2003) *Discrimination in Metropolitan Housing Markets: Phase II — Asians and Pacific Islanders*; or *Discrimination in Metropolitan Housing Markets: Phase I — Supplement*.

Field Implementation and Paired Testing Protocols

Phase III of HDS2000 largely adopted the testing procedures and protocols that were implemented in Phases I and II, making only modest changes to clarify the wording of questions that created confusion in earlier phases. During Phase III, we continued to use the paperless, web-based system developed and deployed in Phase II to enter, transmit, and manage all testing data. This system—known as CODE—did not change the testing protocols or field procedures, but did significantly enhance the speed and reliability of data collection and exchange. In Phase III, we made technical improvements to CODE, expanding it to include all of the forms and enhancing reporting functions.

Phase III field implementation was managed by Regional Coordinators under the supervision of the Urban Institute's Director of Field Operations. The Urban Institute subcontracted with a local fair housing organization in each state to conduct the testing. Staffs of these local testing organizations, designated as Test Coordinators, were responsible for the day-to-day testing activities, directing testers and ensuring that tests were completed according to established procedures and protocols. This section describes the field guidelines and procedures implemented in Phase III, including procedures involved in 1) preparing to test, 2) conducting the test, and 3) following the test.

Preparing to Test. For each advertised housing unit selected for testing, the Urban Institute's sampling staff prepared a Test Authorization Form (TAF), which was transmitted to the local testing organization via the CODE system. Each test was identified by a unique control number, and the TAF specified the parameters of the test structure:

- Transaction Type – the test tenure, whether rental or sales;
- Required Sequence – the randomly assigned order (minority/non-minority) in which the testers should make their test visits;
- Sales and Rental Information – the type of housing (single-family or condo for sales, furnished or unfurnished for rental) of the advertised unit; and
- Ad Information – the information from the advertisement (the type, edition, and name of the ad source, the date of publication, and location of the ad), including texts of the ad.

Local testing organizations were required to use the TAFs they received each week in order, and to begin by making advance calls both to confirm the eligibility of the advertised units and to obtain information needed to make credible test assignments. Advance calls were made for all rental tests. For sales tests, advance calls were only made when the ad did not state a location of the home, a price for the home, or the number of bedrooms in the home. Advance callers were instructed to obtain specific pieces of information about every advertised unit, such as the exact date of availability (for rentals); the housing price; the number of bedrooms; and the

address of the apartment or home. In the case of a rental test, if the advertised unit was no longer available, the advance caller inquired about other units that might be coming available. In order to facilitate the test visits, the advance caller also asked about office hours and whether or not an appointment was needed to view the housing or speak with a housing provider.⁴

Personal, household and financial characteristics, along with a detailed set of instructions, were provided to each tester prior to conducting a test.⁵ Responsibility for developing tester characteristics was shared by the Urban Institute and the Test Coordinators. Test Coordinators developed the tester's personal information, such as current employer, names of household members, and names of creditors, sometimes using the tester's real characteristics, if appropriate. Extensive training was provided to Test Coordinators on how to assign personal characteristics to testers (e.g., employers and occupations to avoid). Other test characteristics, such as number of bedrooms to request and type of approach, were determined by the Test Coordinators using information obtained during the advance phone call. Financial characteristics assigned to testers and housing requests to be made by testers were automatically assigned by the CODE system, based on the characteristics of the advertised housing unit to be tested, such as:

- minimum number of bedrooms acceptable for the household;
- area or geographic preference;
- monthly and annual income for the tester and everyone in the tester's household;
- total household income;
- length of time on the job;
- household assets and debts;
- credit standing; and
- length of time at current residence.

Test Coordinators were required to meet with each tester, individually and in person, prior to a test being conducted. During this initial briefing, Test Coordinators were responsible for: reviewing the test assignment form with the tester and answering any questions about assigned characteristics, instructions, and/or testing procedures; providing the tester with the appropriate test forms and materials; helping the tester develop a "cheat sheet" for sales tests listing detailed financial information from the Test Assignment form; and reviewing procedures

⁴ Advance callers were required to make at least five attempts to reach a housing provider (calling at different times of the day on different days) before a TAF could be deemed ineligible.

⁵ Each tester was provided with only one test assignment at a time and was required to complete that test before receiving another test assignment.

for conducting the test and completing the test report forms. In addition, testers were provided with a detailed set of instructions for every test assignment. These instructions detailed the standard set of tasks testers were expected to accomplish during their test, including how to approach the test site, what questions to ask, and how to end the visit. Annex 1 provides examples of Test Assignment Forms and the detailed instructions provided to both rental and sales testers.

Conducting the Test. HDS2000 required testers to make appointment calls for all sales tests and some rental tests. On sales tests, testers were not to mention the advertised home during this call and were also to refrain from providing their personal and financial information. Testers were also instructed not to commit to bring certain documents, such as tax returns or pay stubs, nor to agree to meet in advance with a lender to be pre-qualified for mortgage financing. If an agent was reluctant to make an appointment with the tester, perhaps stating that there were regular office hours, the tester could specify with the agent what time he or she planned to arrive during those hours in lieu of an actual appointment. While the standard approach for most rental tests was for the tester to “drop in” rather than making an appointment, appointment calls were required when the sampled advertisement did not provide the location of the available housing, when the advertisement indicated that an appointment was required, or when the advance call indicated that an appointment was required.

Several procedures were implemented to ensure that real estate and rental agents could recognize the ethnicity of the American Indian testers. They all had identifiable American Indian surnames, and were trained to introduce themselves at the start of the test visit. In addition, they had physical characteristics that made them identifiable as American Indians, and were instructed to wear identifiable American Indian dress, jewelry, and hairstyles. In some communities, non-Hispanic whites may have difficulty differentiating between American Indians and Hispanics. However, local test coordinators and Urban Institute supervisors confirmed that all of the American Indian testers selected to participate in HDS were unambiguously identifiable.

During their test visits, testers were trained to inquire about the availability of the advertised housing unit that prompted their visit, similar units (units with the same number of bedrooms and within the same price range) that might be available, and other units that might meet their housing needs. On rental tests, testers asked to view all units that they were told would meet their needs and recorded information about all available units whether or not they were able to inspect them. On sales tests, they were required to spend a minimum of three hours viewing units with the agent and to record information about all units that were recommended to them. In response to questions from the real estate or rental agent, testers provided information about their (assigned) household composition, financial characteristics, employment, and housing needs. They were trained to express no preferences for particular amenities or geographic locations, and they did not submit formal applications, agree to credit

checks, or make offers to rent or buy available units. In conjunction with these basic testing protocols, testers were also trained to be convincing in the role of an ordinary homeseeker, obtain as much information as possible from the housing provider about available housing, and take notes in order to remember key information about what occurred during the test and what information was provided by the housing provider.

Following the Test. Following every test visit, each tester was required to complete a set of standardized reporting forms on the CODE system (provided in Annex 1).⁶ Test partners did *not* compare their experiences with one another or record any conclusions about differences in treatment; each simply recorded the details of the treatment he or she experienced as an individual homeseeker. The site visit report forms record observations made by the tester and information provided by the housing provider. In addition to a site visit report form, each tester completed Available Rental Unit Forms for rental tests and Recommended Home Forms for sales tests. In addition, for a randomly selected sub-set of tests (approximately 50 percent), testers were required to compose test narratives. The test narrative provided a detailed, chronological accounting of the test experience. Testers did not know prior to their conducting a test if a narrative would be required. This served both to ensure that testers were conducting all tests with equal attention to established protocols and procedures, including taking notes, and to ensure against fabrication of tests.

After completing each test, testers were instructed to contact their Test Coordinators in order to arrange for an in-person debriefing. At the debriefing, Test Coordinators were responsible for collecting all of the completed test forms, as well as any notes or other materials obtained by the tester; reviewing the forms to make sure they were filled out completely; and discussing any concerns the tester may have had about the test or any deviations they may have made from the test assignment or instructions. Many visits to real estate or rental agencies result in follow-up contact, and these contacts were systematically monitored and recorded. All follow-up contacts (including mail as well as telephone calls) were recorded on Follow-Up Contact Form, which documented when the follow-up was received, who initiated it, and the nature of the follow-up.

Challenges in American Indian Testing. Conducting rigorous research testing with American Indians posed significant challenges, primarily because few local testing organizations have much experience working with American Indians, and experienced American Indian testers are scarce. In Phase III of HDS2000, recruiting and retaining testers were difficult because many fair housing groups have not forged strong relationships with American Indian organizations or within American Indian communities. Without such relationships,

⁶ Among the advantages of web-based data entry, the CODE system performed basic checks for data completeness and consistency as the data were entered, and made test reports immediately available for quality control reviews by local Test Coordinators and the Urban Institute's Regional Coordinators.

communication and trust between the testers and the testing organization can become strained. We found that the most successful testing organizations were those that already had long-standing relationships with several American Indian groups and had already established pools of American Indian testers.

Even with established relationships, however, challenges remain. Because of the short time frame for research testing projects, they offer only part-time work for testers. Consequently, the tester pool is often made up of people who already have full-time jobs and people who are unemployed. Those with full-time jobs may be unreliable because of other work commitments; those who are unemployed may have other problems that lead to unreliability, such as lack of transportation and a telephone, as well as having to search for full-time employment during the testing period. In addition, the testing organizations with whom we contracted for this effort had particular difficulty recruiting and retaining American Indian testers who could credibly portray homeseekers of higher priced housing. And individuals with no experience as homebuyers or homeowners sometimes find it daunting to conduct sales tests.

Traditional culture must also be taken into consideration in understanding some of the challenges involved in testing for discrimination against American Indians. In one Phase III metro area, for example, Test Coordinators noted a marked variation between testers from different tribes. They observed that members of some tribes appeared to be shyer, less assertive, and less likely to have had interaction with non-Native people in metropolitan areas; other tribes seemed to be more integrated into the larger, non-Native community. Finally, some American Indian testers who experienced inappropriate behavior or heard discriminatory remarks from housing providers during a test were so distressed by this experience that they dropped out of the testing altogether. Sometimes Test Coordinators were told about these experiences immediately; other times they found out only well after the testing had been completed.

Using Paired Tests to Measure Discrimination

Data from a sample of standardized and consistent paired tests can be combined and analyzed to measure the incidence and forms of discrimination in urban housing markets. The remainder of this chapter describes the statistical techniques used to analyze data from Phase III of HDS2000 at the state level. Specifically, we discuss basic measures of adverse treatment, the challenge of distinguishing systematic discrimination from random differences in treatment, rental and sales treatment indicators, summary indicators, and tests of statistical significance.

Gross and Net Measures. A paired test can result in any one of three basic outcomes for each measure of treatment: 1) the white tester is favored over the minority; 2) the minority tester is favored over the white; or 3) both testers receive the same treatment (which may be either favorable or unfavorable). The simplest measure of adverse treatment is the share of all tests in which the white tester is favored over the minority. This *gross incidence* approach

provides very simple and understandable indicators of how often whites are treated more favorably than equally qualified minorities. However, there are instances in which minority testers receive better treatment than their white partners. Therefore, we report both the gross incidence of white-favored treatment and the gross incidence of minority-favored treatment.

Although these simple *gross measures* of white-favored and minority-favored treatment are straightforward and easily understandable, they may overstate the frequency of systematic discrimination.⁷ Specifically, adverse treatment may occur during a test not only because of differences in race or ethnicity, but also because of random differences between the circumstances of their visits to the real estate agency. For example, in the time between two testers' visits, an apartment might have been rented, or the agent may have been distracted by personal matters and forgotten about an available unit. Or one member of a tester pair might meet with an agent who is unaware of some available units. Gross measures of white-favored and minority-favored treatment include some random factors, and therefore provide *upper-bound estimates* of systematic discrimination.⁸

One strategy for estimating systematic discrimination, that is, to remove the cases where non-discriminatory random events are responsible for differences in treatment, is to subtract the incidence of minority-favored treatment from the incidence of white-favored treatment to produce a *net measure*. This approach essentially assumes that all cases of minority-favored treatment are attributable to random factors—that systematic discrimination never favors minorities—and that random white-favored treatment occurs just as frequently as random minority-favored treatment. Based on these assumptions, the net measure subtracts differences due to random factors from the total incidence of white-favored treatment.

However, it seems unlikely that all minority-favored treatment is the result of random factors; sometimes minorities may be systematically favored on the basis of their race or ethnicity. For example, a minority landlord might prefer to rent to families of his or her own race or a real estate agent might think that minority customers need extra assistance. Other instances of minority-favored treatment might reflect a form of race-based steering, in which white customers are discouraged from considering units in minority neighborhoods or developments. The net measure subtracts not only random differences but also some systematic differences, and therefore probably understates the frequency of systematic

⁷ We use the term “systematic discrimination” to mean differences in treatment that are attributable to a customer’s race or ethnicity, rather than to any other differences in tester characteristics or test circumstances. This term is not the same as “intentional” discrimination, nor is it intended to mean that these differences would necessarily be ruled as violations of federal fair housing law.

⁸ Note that it is conceivable that random factors might *reduce* the observed incidence of white-favored or minority-favored treatment, so that the gross-incidence measure is technically not an absolute upper-bound for systematic discrimination.

discrimination. Thus, net measures provide *lower-bound estimates* of systematic discrimination,⁹ and they reflect the extent to which the differential treatment that occurs (some systematically and some randomly) is more likely to favor whites than minorities.

Rental and Sales Treatment Indicators. A visit with a rental or sales agent is a complex transaction, and may include many forms of favorable or unfavorable treatment. This report presents results for a series of individual treatment indicators that reflect important aspects of the housing transaction. Many, but not all, of these indicators are common to both rental and sales tests. In selecting indicators for analysis, we have focused on forms of treatment that can be unambiguously measured, and appear to have real potential to affect the outcomes of housing search. Ultimately, other analysts may choose to focus on additional or alternative treatment indicators. But the indicators presented here provide a comprehensive overview of the treatment testers received during their visits to real estate and rental agents' offices.¹⁰

Indicators of adverse treatment in rental housing transactions address four critical aspects of the interaction between a renter and a landlord or rental agent. The first group of indicators focuses on the extent to which minority and white partners received comparable information in response to their inquiries about the availability of the advertised housing unit and other similar units that would meet their needs:

- Was the advertised housing unit available?
- Were similar units available?
- How many units were available?

Testers not only inquired about the availability of housing units, but they also attempted to inspect units that were available for rent. Therefore, the next group of treatment indicators focuses on whether minority and white partners were able to inspect the advertised housing unit and/or other available units:

- Was the advertised unit inspected (if available)?
- Were similar units inspected (if available)?

⁹ Even when no statistically significant pattern of race-based differential treatment is observed, individual cases of discrimination may occur. Specifically, even if the net measure is not significantly different zero, there may in fact be instances of race-based discrimination, although the overall pattern does not systematically favor one group over the other. See Annex 2 for a discussion on tests of statistical significance.

¹⁰ Note that the results presented here do *not* include differences in treatment that testers may have experienced during their appointment calls. Although discrimination may occur at this stage, we are not confident that agents are aware of a tester's race or ethnicity at the time of a telephone call, and therefore have decided to limit our analysis to the in-person visit.

- How many units were inspected?

The third group of treatment indicators explores potential differences in the costs quoted to minority and white testers for comparable housing:¹¹

- How much was the rent for the advertised unit (if available)?
- Were rental incentives offered?
- How large a security deposit was required?
- Was an application fee required?¹²

Finally, the last group of treatment measures for rental tests assesses the extent to which agents encouraged or helped minority and white testers to complete the rental transaction:

- Did the agent make follow-up contact?
- Was the tester asked to complete an application?
- Was the tester told that a credit check was required?¹³
- Were arrangements made for future contact?

Indicators of adverse treatment in sales housing transactions address five critical aspects of the interaction between a homebuyer and a real estate agent. The first group of indicators focuses on the extent to which minority and white partners received comparable information in response to their inquiries about the availability of the advertised home and other similar homes that would meet their needs:

- Was the advertised housing unit available?
- Were similar units available?
- How many units were available?

Testers not only inquired about the availability of homes, but they also attempted to inspect homes that were available. Therefore, the next group of treatment indicators focuses on whether minority and white partners were able to inspect the advertised home and/or other available homes:

¹¹ For both rent and security deposit, we performed a manual match of addresses to confirm that the units identified as the “advertised unit” to the white and minority partners were the same. Any difference in dollar amounts between the white and minority tester was counted as a difference in treatment.

¹² Requiring an application fee from one tester but not from the other is viewed as unfavorable treatment because it raises the cost of housing search.

¹³ This indicator was not included in Phase I because the information needed to construct it was not available for HDS 1989.

- Was the advertised unit inspected (if available)?
- Were similar units inspected (if available)?
- How many units were inspected?

The third group of treatment indicators explores potential differences in the neighborhoods where homes were made available for minority and white homebuyers.¹⁴

- Average percent white for neighborhoods where recommended homes were located.
- Average percent white for neighborhoods where inspected homes were located.

Real estate agents can play an important role in helping homebuyers learn about mortgage financing options. Therefore, the fourth group of sales treatment indicators assesses the financing assistance agents provided to minority and white homebuyers:

- Was help with financing offered?
- Did the agent “pre-qualify” the tester for mortgage financing?
- Were specific lenders recommended?

Finally, the last group of treatment measures for sales tests assesses the extent to which agents encouraged or helped minority and white testers to complete the sales transaction:

- Did the agent make follow-up contact?
- Was the tester told that he or she must be pre-qualified before seeing an agent?
- Was the tester told he or she was qualified to buy a home?
- Were arrangements made for future contacts?

Summary Indicators. In addition to presenting results for all of the individual treatment indicators discussed above, this report combines these individual indicators to create *composite measures* for categories of treatment (such as housing availability or housing costs) as well as for the transaction as a whole.¹⁵ The first type of composite classifies tests as white-favored if the white tester received favorable treatment on one or more individual items, while his or her minority partner received *no* favorable treatment. Tests are classified as “neutral” if one tester was favored on some individual treatment items and his or her partner was favored on even one item. This approach has the advantage that it identifies tests where one partner was

¹⁴ A difference in the average racial composition of neighborhoods for white and minority testers was counted as a difference in treatment only if it exceeded 5 percentage points.

¹⁵ Again, it is important to emphasize the difference between methods used for the statistical analysis of paired testing results and methods used to assemble or assess evidence of unlawful conduct in an individual case. No pre-determined set of decision criteria can substitute for case-by-case judgments about test results.

unambiguously favored over the other. But it may incorrectly classify tests as neutral when one tester received favorable treatment on several items, while his or her partner was favored on only one. This approach also classifies tests as neutral if one tester was favored on the most important item while his or her partner was favored on items of lesser significance. Therefore, it may understate the overall incidence of differential treatment across indicators, but nonetheless provides a very useful measure of the *consistency* of adverse treatment.

In addition to the consistency approach, *hierarchical* composites were constructed by considering the relative importance of individual treatment measures to determine whether one tester was favored over the other. For each category of treatment measures (and for the overall test experience), a hierarchy of importance was established *independent* of analysis of the testing results. For example, in the *availability* category, if the white tester was told that the advertised home was available, while the minority was told it was no longer available, then the white tester was deemed to be favored overall, even if the minority was favored on less important items. Exhibit 2-5 presents the decision rules used to create composite measures of differential treatment for both rental and sales tests. The hierarchical composites offer the advantage of reflecting important differences in the treatment of minorities and whites. But because random differences on a single treatment indicator may cause a test to be classified as white-favored or minority-favored, the gross hierarchical composite measures may overstate the incidence of systematic discrimination. Therefore, we present both *consistency* composites and *hierarchical* composites for the overall testing experience.

Exhibit 2-5: Construction of Hierarchical Composites

Rental Availability	
Advertised Unit Available?	1
Similar Units Available?	2
Number of Units Available	3
Rental Inspection	
Advertised Unit Inspected?	1
Similar Units Inspected?	2
Number of Units Inspected	3
Rental Cost	
Rent for Advertised Unit	1
Rental Incentives Offered?	2
Amount of Security Deposit	3
Application Fee Required?	4
Rental Encouragement	
Follow-up Contact from Agent?	1
Asked to Complete Application?	2
Credit Check Required?	3
Arrangements for Future?	4
Overall Rental Treatment	
Advertised Unit Available?	1
Advertised Unit Inspected?	2
Rent for Advertised Unit	3
Similar Units Available?	4
Similar Units Inspected?	5
Number of Units Available	6
Number of Units Inspected	7
Rental Incentives Offered?	8
Amount of Security Deposit	9
Application Fee Required?	10
Follow-up Contact from Agent?	11
Asked to Complete Application?	12
Credit Check Required?	13
Arrangements for Future?	14

Sales Availability	
Advertised Unit Available?	1
Similar Units Available?	2
Number of Units Available	3
Sales Inspection	
Advertised Unit Inspected?	1
Similar Units Inspected?	2
Number of Units Inspected	3
Geographic Steering	
Steering – Homes Recommended	-
Steering – Homes Inspected	-
Financing Assistance	
Help with Financing Offered?	1
Agent Pre-Qualified Tester?	2
Lenders Recommended?	3
Sales Encouragement	
Follow-up Contact from Agent?	1
Pre-Qualification Required?	2
Told Qualified to Buy?	3
Arrangements for Future?	4
Overall Sales Treatment	
Advertised Unit Available?	1
Advertised Unit Inspected?	2
Similar Units Available	3
Similar Units Inspected?	4
Steering – Homes Recommended	5
Number of Units Available	6
Steering – Homes Inspected	7
Number of Units Inspected	8
Help with Financing Offered?	9
Agent Pre-Qualified Tester?	10
Lenders Recommended?	11
Follow-up Contact from Agent?	12
Pre-Qualification Required?	13
Told Qualified to Buy?	14
Arrangements for Future?	15

3. STATE ESTIMATES OF DISCRIMINATION AGAINST AMERICAN INDIANS

No previous testing studies have focused on systematically measuring the incidence and forms of discrimination against American Indian homeseekers. As discussed in chapters 1 and 2, Phase III of HDS2000 produced state-level estimates of discrimination against American Indian renters in Minnesota, Montana, and New Mexico, as well as estimates of discrimination against American Indian homebuyers in New Mexico.

Montana Rental Testing Results

During the fall of 2002 (and early 2003), 121 American Indian/white rental tests were conducted in three Montana metropolitan areas: Billings, Great Falls and Missoula. These metropolitan areas account for 100 percent of Montana's metropolitan American Indian population.

Housing Availability. In Montana, American Indians inquiring about recently advertised rental housing experience significant adverse treatment with respect to availability (see Exhibit 3-1). In 10.0 percent of tests, only the white tester was told about the availability of units similar to the advertised unit (compared to only 4.0 percent of tests in which American Indians were favored). And whites were told about more available units than their Indian counterparts in 17.3

A 43-year old American Indian woman visited an apartment building in Billings, asking about a one-bedroom apartment to live in by herself. She was looking to pay between \$250 and \$300 per month in rent. The building manager told her that the advertised unit was no longer available, and did not tell her about or show her any alternatives. A few hours later, a 55-year old white woman met with the same building manager, and asked about the same type of apartment. She was told that the advertised unit was still available, and she was able to walk through it that afternoon.

percent of tests (compared to only 5.6 percent Indian-favored). Overall, whites were favored with respect to housing availability in 18.2 percent of tests (compared to only 8.7 percent Indian-favored). The lower-bound (net) measures of systematic discrimination are statistically significant for the availability of similar units (6.0 percent), the number of available units (11.6 percent), and the overall availability composite (9.5 percent).

**Exhibit 3-1: Differential Treatment for Housing Availability,
American Indian/White Rental Tests, Montana**

HOUSING AVAILABILITY	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Advertised unit available?	7.3%	3.1%	4.3%
Similar units available?	10.0%	4.0%	6.0% *
Number units available	17.3%	5.6%	11.6% **
Overall availability	18.2%	8.7%	9.5% **
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

Housing Inspections. We find no statistically significant evidence of systematic adverse treatment with respect to housing inspections for American Indian renters in Montana's metropolitan areas. As shown in Exhibit 3-2, none of the lower-bound (net) estimates of discrimination are statistically significant.

**Exhibit 3-2: Differential Treatment for Housing Inspections,
American Indian/White Rental Tests, Montana**

HOUSING INSPECTION	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Advertised unit inspected?	7.1%	4.8%	2.2%
Similar units inspected?	2.4%	0.9%	1.4%
Number units inspected	8.7%	6.9%	1.8%
Overall inspection	8.7%	9.4%	-0.7%
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

Housing Costs. We also find no statistically significant evidence of systematic adverse treatment with respect to housing costs in Montana's metropolitan rental markets. As shown in Exhibit 3-3, none of the lower-bound (net) estimates of discrimination are statistically significant.

**Exhibit 3-3: Differential Treatment for Housing Costs,
American Indian/White Rental Tests, Montana**

HOUSING COST	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Rent for advertised unit	5.2%	5.3%	-0.1%
Rental incentives offered?	2.4%	2.0%	0.4%
Amount of security deposit	7.0%	7.5%	-0.5%
Application fee required?	4.1%	1.0%	3.1%
Overall cost	11.6%	9.4%	2.2%
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

Agent Encouragement. We find no statistically significant evidence of systematic adverse treatment with respect to agent encouragement for American Indian renters in Montana's metropolitan areas. As shown in Exhibit 3-4, none of the lower-bound (net) estimates of discrimination are statistically significant.

**Exhibit 3-4: Differential Treatment for Agent Encouragement,
American Indian/White Rental Tests, Montana**

AGENT ENCOURAGEMENT	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Follow-up contact from agent?	1.7%	0.0%	1.7%
Asked to complete application?	18.9%	11.2%	7.7%
Credit check required?	5.6%	9.6%	-4.0%
Arrangements for future?	12.6%	13.0%	-0.4%
Overall encouragement	31.2%	22.0%	9.2%
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

Summary Indicators. In Montana, the statistically significant evidence of discrimination in rental housing availability does not yield significant lower-bound estimates for the overall composite indicators (see Exhibit 3-5). However, white renters in Montana's metropolitan housing markets were consistently favored over the American Indian counterparts in 28.6 percent of tests.

**Exhibit 3-5: Summary Indicators of Differential Treatment,
American Indian/White Rental Tests, Montana**

SUMMARY MEASURES	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Hierarchical	39.7%	32.0%	7.7%
Consistency	28.6%	24.1%	4.5%
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

Minnesota Rental Testing Results

During the fall of 2002, 51 American Indian/white rental tests were conducted in two Minnesota metropolitan areas: Minneapolis-St. Paul and Duluth.¹ These metropolitan areas account for 97 percent of Minnesota's metropolitan American Indian population. Despite the small sample size, these tests provide some statistically reliable information about patterns of discrimination against American Indians searching for rental housing in Minnesota's metropolitan area.

Housing Availability. In Minnesota, American Indians inquiring about recently advertised rental housing experience significant adverse treatment with respect to availability (see Exhibit 3-6). The lower-bound (net) measures of systematic discrimination are not statistically significant for any of the individual treatment measures. But the overall estimate of adverse treatment on housing availability indicates that whites are favored over comparable American Indians in 31.1 percent of tests, compared

In Minneapolis, an American Indian woman visited a rental property to inquire about an advertisement she had seen. She and her husband were looking for a two-bedroom apartment, and could afford to pay as much as \$2,285 per month. The rental agent told her that although the advertised unit was no longer available, there were two other apartments in the property that she might want to consider. She was able to inspect one of them. However, when her white partner visited the same property later in the day and made a comparable request of the same rental agent, she was told that the advertised unit was available, along with two other apartments, and she was able to inspect all three of the available units.

¹ As discussed in Chapter 2, the local testing organization in Minnesota had difficulty completing the target number of tests in the time available. However, because some of the differences in treatment were large (yielding net measures over 12 percentage points), they provide statistically reliable evidence of discrimination.

to only 15.5 percent Indian-favored treatment. The lower-bound (net) estimate of systematic discrimination for this composite indicator is statistically significant at 15.7 percent.

**Exhibit 3-6: Differential Treatment for Housing Availability,
American Indian/White Rental Tests, Minnesota**

HOUSING AVAILABILITY	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Advertised unit available?	7.8%	3.9%	3.9%
Similar units available?	13.7%	7.8%	5.9%
Number units available	25.5%	17.5%	8.0%
Overall availability	31.3%	15.5%	15.7% *
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

Housing Inspections. We find no statistically significant evidence of systematic adverse treatment with respect to housing inspections for American Indian renters in Minnesota's metropolitan areas. As shown in Exhibit 3-7, none of the lower-bound (net) estimates of discrimination are statistically significant.

**Exhibit 3-7: Differential Treatment for Housing Inspections,
American Indian/White Rental Tests, Minnesota**

HOUSING INSPECTION	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Advertised unit inspected?	15.5%	9.8%	5.7%
Similar units inspected?	15.7%	5.8%	9.9%
Number units inspected	23.4%	13.6%	9.8%
Overall inspection	29.3%	17.6%	11.7%
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

Housing Costs. We also find no statistically significant evidence of systematic adverse treatment with respect to housing costs in Minnesota's metropolitan rental markets. As shown in Exhibit 3-8, none of the lower-bound (net) estimates of discrimination are statistically significant.

**Exhibit 3-8: Differential Treatment for Housing Costs,
American Indian/White Rental Tests, Minnesota**

HOUSING COST	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Rent for advertised unit	0.0%	7.4%	-7.4%
Rental incentives offered?	8.4%	2.1%	6.3%
Amount of security deposit	3.7%	2.6%	1.1%
Application fee required?	2.0%	0.0%	2.0%
Overall cost	11.8%	7.9%	3.9%
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

Agent Encouragement. We find no statistically significant evidence of systematic adverse treatment with respect to agent encouragement for American Indian renters in Minnesota's metropolitan areas. As shown in Exhibit 3-9, none of the lower-bound (net) estimates of discrimination are statistically significant.

**Exhibit 3-9: Differential Treatment for Agent Encouragement,
American Indian/White Rental Tests, Minnesota**

AGENT ENCOURAGEMENT	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Follow-up contact from agent?	3.9%	1.9%	1.9%
Asked to complete application?	17.5%	11.8%	5.7%
Credit check required?	8.0%	11.7%	-3.7%
Arrangements for future?	23.5%	11.9%	11.7%
Overall encouragement	41.1%	29.4%	11.7%
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

Summary Indicators. Despite the fact that only the housing availability indicators showed evidence of systematic discrimination against American Indian renters in Minnesota, the overall indicators of adverse treatment are statistically significant (see Exhibit 3-10). The hierarchical composite shows that white renters were favored over comparable American Indians in 54.7 percent of tests, with a statistically significant lower-bound (net) discrimination estimate of 21.3 percent. Moreover, white renters in Minnesota's metropolitan housing markets were consistently favored over the American Indian counterparts in 33.3 percent of tests.

**Exhibit 3-10: Summary Indicators of Differential Treatment,
American Indian/White Rental Tests, Minnesota**

SUMMARY MEASURES	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Hierarchical	54.7%	33.4%	21.3% *
Consistency	33.3%	13.8%	19.5% **
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

New Mexico Rental Testing Results

During the fall of 2002 (and early 2003), 125 American Indian/white rental tests were conducted in three New Mexico metropolitan areas: Albuquerque, Las Cruces, and Santa Fe. These metropolitan areas account for 100 percent of New Mexico's metropolitan American Indian population.

Housing Availability. In New Mexico, American Indians inquiring about recently advertised rental housing experience significant adverse treatment for every indicator of availability (see Exhibit 3-11). In 12.3 percent of tests, only the white tester was told that the advertised housing unit was available, compared to 4.7 percent of tests in which the Indian was favored over his or her white partner. In 16.9 percent of tests, only the white tester was told about the availability of units similar to the advertised unit (compared to 4.1 percent of tests in which American Indians were favored). And whites were told about more available units than their Indian counterparts in 27.6 percent of tests (compared to only 11.0 percent Indian-favored). Overall, whites were favored with respect to housing availability in 31.7 percent of tests (compared to 13.5 percent Indian-favored). The lower-bound (net) measures of systematic discrimination are statistically significant for the

In Albuquerque, a 21-year old American Indian woman visited an apartment complex to inquire about the availability of an apartment for herself and her husband. She was looking for a two-bedroom apartment for between \$725 and \$775. She was told that the advertised unit was available, and told about another possible unit she might consider. However, the rental agent was not able to show her any apartments. Later that day, a 24-year old white woman visited the same complex, also inquiring about the availability of two-bedroom apartments in the same rent range. She met with the same agent, who told her that the advertised apartment was indeed available, as well as three other possible units, and gave her the opportunity to inspect one of these apartments to see whether she liked it.

availability of the advertised unit (7.6 percent), availability of similar units (12.8 percent), the number of available units (16.5 percent), and the overall availability composite (18.2 percent).

**Exhibit 3-11: Differential Treatment for Housing Availability,
American Indian/White Rental Tests, New Mexico**

HOUSING AVAILABILITY	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Advertised unit available?	12.3%	4.7%	7.6% **
Similar units available?	16.9%	4.1%	12.8% **
Number units available	27.6%	11.0%	16.5% **
Overall availability	31.7%	13.5%	18.2% **
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

Housing Inspections. We find no statistically significant evidence of systematic adverse treatment with respect to housing inspections for American Indian renters in New Mexico's metropolitan areas. As shown in Exhibit 3-12, none of the lower-bound (net) estimates of discrimination are statistically significant.

**Exhibit 3-12: Differential Treatment for Housing Inspections,
American Indian/White Rental Tests, New Mexico**

HOUSING INSPECTION	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Advertised unit inspected?	9.6%	8.0%	1.6%
Similar units inspected?	3.9%	4.1%	-0.2%
Number units inspected	16.8%	13.7%	3.1%
Overall inspection	18.4%	14.5%	3.9%
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

Housing Costs. We also find no statistically significant evidence of systematic adverse treatment with respect to housing costs in New Mexico's metropolitan rental markets. As shown in Exhibit 3-13, none of the lower-bound (net) estimates of discrimination are statistically significant.

**Exhibit 3-13: Differential Treatment for Housing Costs,
American Indian/White Rental Tests, New Mexico**

HOUSING COST	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Rent for advertised unit	7.0%	9.7%	-2.8%
Rental incentives offered?	7.3%	7.3%	0.0%
Amount of security deposit	5.9%	8.1%	-2.2%
Application fee required?	4.5%	6.7%	-2.2%
Overall cost	12.5%	16.7%	-4.2%
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

Agent Encouragement. We find no statistically significant evidence of systematic adverse treatment with respect to agent encouragement for American Indian renters in New Mexico's metropolitan areas. As shown in Exhibit 3-14, none of the lower-bound (net) estimates of discrimination are statistically significant.

**Exhibit 3-14: Differential Treatment for Agent Encouragement,
American Indian/White Rental Tests, New Mexico**

AGENT ENCOURAGEMENT	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Follow-up contact from agent?	3.1%	4.1%	-1.0%
Asked to complete application?	18.6%	13.7%	4.9%
Credit check required?	19.2%	12.3%	6.9%
Arrangements for future?	20.3%	22.8%	-2.5%
Overall encouragement	37.1%	33.6%	3.4%
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

Summary Indicators. In New Mexico as in Minnesota, even though only the housing availability indicators showed evidence of systematic discrimination against American Indian renters, the overall indicators of adverse treatment are statistically significant (see Exhibit 3-15). The hierarchical composite shows that white renters were favored over comparable American Indians in 54.8 percent of tests, with a statistically significant lower-bound (net) discrimination estimate of 19.0 percent. Moreover, white renters in Minnesota's metropolitan housing markets were consistently favored over the American Indian counterparts in 25.7 percent of tests.

**Exhibit 3-15: Summary Indicators of Differential Treatment,
American Indian/White Rental Tests, New Mexico**

SUMMARY MEASURES	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Hierarchical	54.8%	35.8%	19.0% **
Consistency	25.7%	17.1%	8.6%
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

New Mexico Sales Testing Results

During the fall of 2002, 100 American Indian/white sales tests were conducted in three New Mexico metropolitan areas: Albuquerque, Las Cruces, and Santa Fe. These metropolitan areas account for 100 percent of New Mexico's metropolitan American Indian population.

Housing Availability. Unlike New Mexico's rental market, we find no statistically significant evidence of systematic adverse treatment with respect to housing availability for American Indian homebuyers in New Mexico's metropolitan areas. As shown in Exhibit 3-16, none of the lower-bound (net) estimates of discrimination are statistically significant.

**Exhibit 3-16: Differential Treatment for Housing Availability,
American Indian/White Sales Tests, New Mexico**

HOUSING AVAILABILITY	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Advertised unit available?	14.1%	15.7%	-1.6%
Similar units available?	17.0%	18.0%	-0.9%
Number units available	44.0%	44.0%	-0.1%
Overall availability	45.2%	44.8%	0.3%
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

Housing Inspections. Similarly, there is no statistically significant evidence of systematic adverse treatment against American Indians with respect to housing inspections in New Mexico's metropolitan sales markets. As shown in Exhibit 3-17, none of the lower-bound (net) estimates of discrimination are statistically significant.

**Exhibit 3-17: Differential Treatment for Housing Inspections,
American Indian/White Sales Tests, New Mexico**

HOUSING INSPECTION	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Advertised unit inspected?	14.0%	17.8%	-3.7%
Similar units inspected	13.0%	19.0%	-6.0%
Number units inspected	41.1%	40.0%	1.1%
Overall inspection	41.3%	41.9%	-0.6%
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

Geographic Steering. American Indian homebuyers in New Mexico's metropolitan areas do appear to face significant racial steering (see Exhibit 3-18). In 24.0 percent of tests, whites were shown homes in more predominantly white neighborhoods than their Indian partners, compared to only 11.0 percent of tests in which American Indians were shown homes in more predominantly white neighborhoods. Differences in the racial composition of neighborhoods where homes were recommended to whites and Indians were not statistically significant.

**Exhibit 3-18: Geographic Steering,
American Indian/White Sales Tests, New Mexico**

GEOGRAPHIC STEERING	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Steering - homes recommended	23.0%	18.0%	5.0%
Steering - homes inspected	24.0%	11.0%	13.1% **
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

Financing Assistance. We find no statistically significant evidence of systematic adverse treatment with respect to financing assistance for American Indian homebuyers in New Mexico's metropolitan areas. As shown in Exhibit 3-19, none of the lower-bound (net) estimates of discrimination are statistically significant.

**Exhibit 3-19: Differential Treatment for Financing Assistance,
American Indian/White Sales Tests, New Mexico**

FINANCING ASSISTANCE	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Help with financing offered?	24.9%	19.0%	5.9%
Agent prequalified tester?	21.9%	24.1%	-2.2%
Lenders recommended?	18.9%	16.1%	2.8%
Overall financing	38.0%	36.1%	1.8%
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

Agent Encouragement. We also find no statistically significant evidence of systematic adverse treatment with respect to agent encouragement for American Indian homebuyers in New Mexico's metropolitan areas. As shown in Exhibit 3-20, none of the lower-bound (net) estimates of discrimination are statistically significant.

**Exhibit 3-20: Differential Treatment for Agent Encouragement,
American Indian/White Sales Tests, New Mexico**

AGENT ENCOURAGEMENT	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Follow-up contact from agent?	16.0%	16.1%	-0.1%
Prequalification required?	8.1%	7.9%	0.1%
Told qualified?	1.0%	0.0%	1.0%
Arrangements for future?	7.0%	9.0%	-2.0%
Overall encouragement	26.1%	28.1%	-2.0%
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

Summary Indicators. In New Mexico's metropolitan sales markets, the statistically significant evidence of geographic steering does not yield significant lower-bound estimates for the overall composite indicators (see Exhibit 3-21). However, white homebuyers in New Mexico's metropolitan housing markets were consistently favored over the American Indian counterparts in 16.9 percent of tests.

**Exhibit 3-21: Summary Indicators of Differential Treatment,
American Indian/White Sales Tests, New Mexico**

SUMMARY MEASURES	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Hierarchical	52.1%	46.9%	5.2%
Consistency	16.9%	16.9%	0.0%
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

4. CONCLUSIONS AND IMPLICATIONS

This phase of HDS2000 represents an initial, exploratory effort to extend rigorous research testing to measure the extent to which American Indians face systematic discrimination when they search for housing in metropolitan areas. Compared to other racial and ethnic minorities in the U.S., the American Indian population is small and geographically concentrated; so we focused on producing a limited number of state-level estimates of discrimination rather than a single set of nationwide results. This chapter briefly reviews these initial findings, and discusses the implications of this exploratory effort for future research on housing discrimination against American Indians.

Summary of Findings

In the metropolitan housing markets of Minnesota, Montana, and New Mexico, American Indian renters experience significant adverse treatment with respect to housing availability. Exhibit 4-1 presents pooled results of our rental testing across all three of these states. In 10.3 percent of the tests, American Indians were told that the advertised unit was no longer available, while their white partners were told that it was available. In contrast, American Indians were favored over whites with respect to availability of the advertised unit in only 4.3 percent of tests. In 15.1 percent of tests, only the white tester was told about the availability of units similar to the advertised unit (compared to only 5.3 percent of tests in which American Indians were favored). And whites were told about more available units than their Indian counterparts in 25.7 percent of tests (compared to only 12.5 percent Indian-favored). Overall, whites were favored with respect to housing availability in 30.0 percent of tests (compared to only 13.6 percent Indian-favored). The lower-bound (net) measures of systematic discrimination are statistically significant for all of the treatment indicators in this category: availability of the advertised unit (6.1 percent), availability of similar units (9.8 percent), number of available units (13.2 percent), and the overall availability composite (16.4 percent).

This pattern of discrimination across all indicators of rental housing availability is striking in comparison to results from earlier phases of HDS2000. It suggests that American Indians may be more likely than African Americans, Hispanics, or Asians and Pacific Islanders to be denied access to available rental housing in metropolitan areas. More specifically, the lower-bound (net) estimates of discrimination on housing availability at the national level were 4.6 percent for African American renters, 12.4 percent for Hispanic renters, and not statistically significant for Asian and Pacific Islander renters. Although the three-state estimate of 16.4 percent for American Indians is not directly comparable, it does stand out as a strikingly high level of discrimination on the most basic aspect of the rental housing transaction.

**Exhibit 4-1: Pooled Estimates of Differential Treatment,
American Indian/White Rental Tests, Minnesota, Montana, and New Mexico**

HOUSING AVAILABILITY	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Advertised unit available?	10.3%	4.3%	6.1% **
Similar units available?	15.1%	5.3%	9.8% **
Number units available	25.7%	12.5%	13.2% **
Overall availability	30.0%	13.6%	16.4% **
HOUSING INSPECTION	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Advertised unit inspected?	11.2%	8.2%	3.0%
Similar units inspected?	7.5%	4.3%	3.2%
Number units inspected	18.0%	12.9%	5.1%
Overall inspection	20.8%	14.9%	5.9% *
HOUSING COST	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Rent for advertised unit	4.5%	8.5%	-3.9%
Rental incentives offered?	7.1%	5.0%	2.1%
Amount of security deposit	5.3%	6.3%	-1.0%
Application fee required?	3.7%	3.9%	-0.2%
Overall cost	12.2%	13.0%	-0.9%
AGENT ENCOURAGEMENT	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Follow-up contact from agent?	3.2%	2.9%	0.2%
Asked to complete application?	18.3%	12.8%	5.5% *
Credit check required?	14.0%	11.8%	2.2%
Arrangements for future?	20.5%	18.2%	2.3%
Overall encouragement	37.7%	31.0%	6.7%
SUMMARY MEASURES	Differential Treatment in 2002		
	% white favored	% AI favored	net measure
Hierarchical	53.0%	34.6%	18.4% **
Consistency	28.5%	16.9%	11.6% **
Note: For net estimates and change estimates, * indicates statistical significance at the 90 % level, and ** indicates significance at the 95% level (using a two-tailed test). Gross estimates are by definition statistically significant.			

The pooled rental testing results also suggest that American Indians may face systematic discrimination in housing inspections and at least one indicator of agent encouragement. Specifically, whites were favored with respect to the composite indicator for housing inspections in 20.8 percent of tests, compared to 14.9 percent in which American

Indians were favored. The lower-bound (net) measure of systematic discrimination on this indicator was statistically significant at 5.9 percent. In addition, only the white tester was invited to complete an application in 18.3 percent of tests, compared to 12.8 percent in which only the American Indian tester received such an invitation. For this indicator, the lower-bound (net) measure was statistically significant at 5.5 percent. However, neither of these treatment measures was statistically significant for the individual state estimates.

Even though housing availability appears to be the primary form of adverse treatment experienced by American Indian renters in Minnesota, Montana, and New Mexico, the overall indicators of adverse treatment are also high and statistically significant. The hierarchical composite shows that white renters were favored over comparable American Indians in 53.0 percent of tests, with a statistically significant lower-bound (net) discrimination estimate of 18.4 percent. Again, this lower-bound (net) estimate of discrimination against American Indians is high compared to national estimates for African Americans (8.4 percent) and Hispanics (13.8 percent).

Results are far less conclusive for discrimination against American Indian homebuyers. As discussed in chapter 2, sales testing was conducted only in New Mexico. American Indian homebuyers in New Mexico's metropolitan housing markets appear to face systematic discrimination with respect to geographic steering, but on other indicators the estimated levels of systematic discrimination were not statistically significant. And the overall (net) estimates of discrimination were not statistically significant. These results should be interpreted with caution, since they are based on only 100 tests in a single state.

Implications for Future Research Testing

Phase III of HDS2000 has established that it is feasible to conduct rigorous research testing for discrimination against American Indians searching for housing in metropolitan areas, and that serious levels of discrimination exist, at least in metropolitan rental markets. Clearly, the problem of discrimination against American Indian homeseekers deserves continued research and policy attention. However, this exploratory effort encountered substantial challenges, with implications for ongoing research.

First, the population of American Indians living in metropolitan areas is relatively small and highly concentrated in a few states. For policy purposes, therefore, it makes more sense to continue to produce estimates of discrimination against American Indians at the state or metropolitan level, rather than attempting to design a meaningful nationwide sample of sites. Potentially important additional states to cover would include Arizona, Oklahoma, California, and Alaska, all of which have significant populations of American Indians living in metropolitan areas.

In all of these states, it is critical to conduct testing in small metropolitan areas (like Billings, Montana and Las Cruces, New Mexico), as well as in larger metropolitan areas. However, conducting a large volume of tests in a small metropolitan market can be difficult, because these areas often lack experienced testing organizations and testers, the number of rental and sales agents may be relatively small and close-knit, and a large number of visits by minority homeseekers over a short time period may arouse suspicion. Distributing the testing activity across several metropolitan areas in a state can produce a reasonable statewide sample size without saturating any individual market. However, deploying testers to several different locations throughout a state also poses logistical challenges and increases costs.

Moreover, as discussed in chapter 2, few local testing organizations have much experience working with American Indians and experienced American Indian testers are scarce. This makes it particularly difficult to recruit and retain a sufficient pool of testers to conduct a large volume of research tests over a two- to four-month period of time. One solution to this problem would be to form partnerships between experienced testing organizations and one or more local organizations that have strong ties to the American Indian community. The Indian organizations could assist in recruiting a wider diversity of American Indian testers and providing supplemental training and supports to ensure that testers do not become discouraged by the process. Ideally, American Indians could also be recruited and trained to serve as Test Coordinators as well.

In addition, in order to recruit and retain a substantial pool of well-qualified American Indian testers, it might be necessary to hire testers on a full-time rather than a part-time basis. Supplemental funding for tester transportation, cell phones, and other work-related expenses would also reduce the burden on American Indian testers and provide greater incentives for them to focus on the quality of testing. This would be particularly important for further testing in the sales market, given the difficulty of conducting high-quality sales tests.

All of the strategies outlined here would require longer time periods for further research testing on discrimination against American Indians. In large metropolitan areas where experienced testing organizations and testers exist and numerous rental and sales opportunities thrive, it is feasible to conduct 75 to 100 tests (per tenure) over a two- to four-month period. However, in general, given the challenges involved in measuring discrimination against American Indians, it would make more sense to extend this time period to as much as six months.

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ANNEX 1

TESTS ASSIGNMENT FORMS, REPORTING FORMS, AND INSTRUCTIONS

ADVANCE CALL FORM

(COMPLETE ONE FORM FOR EACH CALL ATTEMPTED)

Control # ____ - ____ - ____ - 3 Person Making Call:

Phone Number(s) (____) _____ ; (____)

Day of the Week: _____

Date ____ / ____ / ____ Time ____ : ____ ☐ AM ☐ PM

1. Were you able to obtain housing information during this advance call? ☐ Yes ☐ No

1a. If No, why not?

- ☐ Left Message on Voice mail, Answering Machine, or Pager
- ☐ Left Message with Person who did not have information
- ☐ Told to Call Back Later
- ☐ Wrong Number
- ☐ No Answer
- ☐ Telephone Number No Longer in Service
- ☐ Other (Specify: _____)

(SKIP to Question 7)

If Yes, Continue:

2. Housing Information (enter one type of unit [i.e., bedroom size] per line):

Address of Apartment/House	# of Bedrooms	Price	Date Available __ / __ / __	Advertised Unit?
a.				<input type="checkbox"/> Yes <input type="checkbox"/> No
b.				<input type="checkbox"/> Yes <input type="checkbox"/> No
c.				<input type="checkbox"/> Yes <input type="checkbox"/> No
d.				<input type="checkbox"/> Yes <input type="checkbox"/> No
e.				<input type="checkbox"/> Yes <input type="checkbox"/> No

3. What are the office hours?

4. Is it possible to drop in to speak with an agent about the available housing?

- ☐ Yes (you may drop in) ☐ No (you must have an appointment)

5. Verify the address to be visited:

6. With whom did you speak? :

7. Is this the final advance call? ☐ Yes ☐ No

7a. If Yes, based on the results of the advance call, is the housing ineligible for any reason?

☐ Yes ☐ No

7b. If Yes, please specify the reason(s) for ineligibility:

- ☐ Housing provider could not be reached after repeated attempts
- ☐ Telephone Number was no longer in service
- ☐ Telephone Number was incorrect
- ☐ Outside of target area for MSA
- ☐ Located on Indian Land (e.g., reservations, Tribal Jurisdictional Statistical Areas, etc.)
- ☐ Seasonal/temporary/vacation/short-term
- ☐ For Sale By Owner
- ☐ Exceeds price range for MSA
- ☐ Multi-unit structure for sale
- ☐ Housing for older persons
- ☐ Unimproved lot (housing is yet to be constructed)
- ☐ New mobile home sale through dealership
- ☐ Share situation
- ☐ Apartment locator service
- ☐ Sublet
- ☐ Public/subsidized housing development
- ☐ Other (specify):

8. Based on the source of the advertisement, the wording of the advertisement, and/or information obtained from a rental agent during the advance call, please check the most appropriate response:

- ☐ The rental advertisement does NOT refer to a specific rental unit but instead describes a "type" of rental housing that is generally made available by this housing provider (check all that apply):
 - ☐ The advertisement is from a monthly apartment guide or other source that only contains general rental housing advertisements.
 - ☐ The advertisement contains wording which clearly indicates the availability of a "type" of rental unit rather than a specific rental unit.
 - ☐ I was informed by an agent during my call that the advertisement does NOT refer to a specific rental housing unit.
 - ☐ Other: _____

- ☐ The rental advertisement refers to a specific rental housing unit (check all that apply):
- ☐ The advertisement contains the exact address of the available housing unit.
 - ☐ I was informed by an agent during my call that the advertisement does refer to a specific rental housing unit.
 - ☐ Other:
- ☐ I am not sure whether the rental advertisement refers to a specific rental unit or whether it refers to a “type” of rental housing that is generally available through this housing provider.

Comments:

9. General Comments:

The Urban Institute Housing Discrimination Study

Test Assignment Form (Rental)

SITECODE	Site	UI Training Test Site
CONTROL	0 CONTROL #	ZZ-R1-0125-2
SEQUENCE	Tester sequence	1
RACEID	RACEID	*****
TESTERID	0 TESTER ID NUMBER	ZZ329-Janelle Scott
ATSTTYPE	0 TYPE OF TEST	rental
AAPPTYPE	0 TYPE OF APPROACH	Drop-In
ADATEV	DATE OF VISIT (mm/dd/yy)	7/15/01
ATIMEV	Time (_ _ : _ _)	10:00
ATIMEVM	A.M. P.M. for time of visit	AM
header9	TEST SITE	
PPNAME	1 Name of Test site (if known)	*****
header11	Site Address	
PADDRS	2 street	*****
PCITY	2 city	*****
PSTATE	2 state	*****
PZIP	2 ZIP 00000	*****
Head171	Telephone number(s) of test site:	
PPHN1	3 First Number (000)000-0000	*****
PPHN2	3 Second Number: (000)000-0000	*****
header20	SOURCE OF INFORMATION ON TEST SITE	
SRCENAME	4 Advertisement: Name of source	Milwaukee Journal Sentinel
ADDATE	5 Advertisement: Date of Publication (mm/dd/yy)	6/10/01
ADTEXT	6 Advertisement: text of ad	CEDARBURG CEDAR PLAZA N142 W6212 Concord St. Suburban living within minutes of

		Milwaukee. Near Hwy 57 and C 2 Bedroom Apartments Appliances, Carpeting, Ceiling Fan \$630 includes HEAT, Security Deposit \$400 1 year lease, no pets. 262-375-1513.	
header24	TYPE OF HOUSING TO BE REQUESTED		
PBEDS	7 Number of Bedrooms to be requested	2	
PMINBED	7a Minimum number of bedrooms for household	0	
PHMTYPS	8 Type of home (SALES only)	-1	
PHMTYPR	9 Type of unit (RENTAL only)	Unfurnished	
PHNEED	10 Date Housing is Needed (mm/dd/yy)	8/1/01	
PHMPRI	Home price	*****	
PHHCOMP	8 Household Composition	Married Couple, No Children	
APRIR	11 Price Range [Tester may look at units for LESS than this range as well] (For RENTAL Only)	605 to 655	
APREFER	Area Preference (IMPORTANT: DO NOT CITE A NEIGHBORHOOD PREFERENCE)		
AAREAP	12 If you are pressed by the agent, you may state that you are looking in	Milwaukee and surrounding counties	
header33	Remember: You are always open to considering any areas recommended by the agent.		
AMOVERR	13 Reason for Moving (Rental Tests)	Lvng with family member/friend; want own place	
AMOVERS	13 Reason for moving (Sales Tests)		
AHEAD55	Other places visited: Just started looking		
header36	ASSIGNED CHARACTERISTICS		
TFNAME	15 Tester Name:	Janelle Scott	
header38	Tester Address		

TFADD1	16 Tester Address	2100 Pine Road			
TFADD2	16 Tester Address (city/state/zip)	Milwaukee, Wisconsin, 53205			
TVPHONE	16 Voice Mail Number Assigned to Tester (000)000-0000	(414)348-6788			
header42	Information on Persons in Household				
ARACE1	18 Tester's race	Black			
TSEX	18 Tester's gender	Female			
AAGE1	18 Tester's age	25			
TH01	Household Income	Gross Monthly Income	Gross Annual Income		
AINCMON1	18 Tester	1475	17450		
AINCMON2	18 Spouse	1150	14050		
AINCMONT	18 Total for Household	2625	31500		
TABH11	Other persons in household	Relationship	Name	Sex	Age
ARELATE2	18 Person 2	Spouse	Bill Scott	Male	26
ARELATE3	18 Person 3			Female	-1
ARELATE4	18 Person 4			Female	-1
ARELATE5	18 Person 5			Female	-1
header73	Employment Information				
AOCC1	19 Tester current occupation	Clerk			
AEMP1	19 Name of tester's current employer	Milwaukee Area Technical College			
AEAD11	19 First line of tester's employer's address	State Street			
AEAD12	19 Second line of tester's employer's address	Milwaukee, WI			
AELNG1	19 Length of employment at current job	3 years			
AOCC2	19 Tester previous occupation				
AEMP2	Name of tester's previous employer				
AEAD21	19 First line of tester's previous employer's address				

AEAD22	19 Second line of tester's previous employer's address		
AELNG2	19 Length of employment at previous job		
ASOCC1	19 Spouse's occupation at current job	Sales Associate	
ASEMP1	19 Name of spouse's current employer	JC Penney Catalog Dept.	
ASEAD11	19 First line of spouse's employer's address	Highland Mall	
ASEAD12	19 Second line of spouse's employer's address	Mequon	
ASELNG1	19 Spouse's length of employment at current job	4 years	
ASOCC2	19 Spouse's occupation at previous job		
ASEMP2	Name of spouse's previous employer		
ASEAD21	19 First line of spouse's previous employer's address		
ASEAD22	19 Second line of spouse's previous employer's address		
header94	Household Assets		

TH31		Financial Institution	Balance
ASAVINST	20 Savings Account		-1
ACHKINST	20 Checking Account		-1
AOTRINST	20 Other asset		-1
ATOTASST	20 Total Assets	-1	
header10	Household Debts		

TABH21	Creditors	Name	Type of account	Monthly payment	Balance owed
ACRDNAM1	21 Creditor 1			-1	-1
ACRDNAM2	21 Creditor 2			-1	-1
ACRDNAM3	21 Creditor 3			-1	-1
ACRDNAM4	21 Creditor 4			-1	-1
ACRDNAM5	21 Creditor 5			-1	-1

ACRDNAM6	21 Creditor 6			-1	-1
ACRDNAM7	21 Creditor 7			-1	-1
ACRDMONT	21 Total monthly payments on all debts	-1			
ACRDBALT	21 Total balance owed on all debts	-1			
AHEAD21	Credit standing: Excellent, no late payments				
header13	CURRENT HOUSING SITUATION				
AHEAD31	Type of current housing: Rent				
ARENTNOW	24 Amount of Current Rent	620			
ALGNCUR	25 Years at Current Residence	2 years			
ALEASETP	26 Type of Rental Agreement at Current Residence	Month-to-Month			
AHEAD61	History of rent payment at current residence: Always on time				
AHEAD62	Other characteristics: Non-smoking, No pets				
ADSITE	28 Directions to the Test Site	Hwy 57 to C. Left on C 1 block, turn right into office.			
RELEASE	Test Released	Yes			

INSTRUCTIONS FOR ALL HDS SITE VISITS - RENTAL

- **If you made an appointment prior to this visit, please ask to speak with the person with whom you made the appointment to meet. If you are dropping in without an appointment on this site visit, please ask to speak with a rental agent. Express interest in and ask to view the rental housing that was advertised for rent.**
- **Ask about the availability of other rental housing with the same number of bedrooms as the advertised housing. Express interest in and ask to view any rental housing which has the same number of bedrooms, provided that it is within your price range and available when you need it.**
- **If a rental agent informs you that the advertised housing is no longer available and no other rental housing is available with the same number of bedrooms as the advertised housing, ask the agent if any other rental units are available for the time you requested. Express interest in and ask to view any other rental housing that: 1) has at least the minimum number of bedrooms for your household; 2) is within your price range; and 3) is available when you need it.**
- **If, at any time during your site visit, a rental agent recommends other rental units to you, you should express interest in and ask to view any rental housing that is recommended by the agent provided it: 1) has at least the minimum number of bedrooms for your household; 2) is within your price range; and 3) is available when you need it.**
- **Please remember to obtain information about the exact address (including apartment #), number of bedrooms, rent, security deposit, other fees, lease length, which utilities are included and the dates of availability for any homes or apartments suggested by the agent if this information is not provided by the end of your visit.**
- **If you are told about any homes or apartments that meet your needs, please ask about the application process and find out what amount of money, if any, would need to accompany a completed application, whether a credit check is conducted and, generally, how long it takes to obtain approval on a rental application once it is submitted.**
- **Do not ask for or complete a rental application. If the agent offers you an application, you should agree to take it with you.**
- **If you are informed that there is a waiting list for rental housing that you requested, please ask how many people are on the waiting list. If the agent invites you to add your name to the waiting list, you should politely decline to add your name.**
- **Lastly, if by the end of your visit the agent has not volunteered his or her name, please ask for it.**



Test Assignment Form (Sales)

SITECODE	Site	UI Training Test Site
CONTROL	0 CONTROL #	ZZ-S1-0125-2
SEQUENCE	Tester sequence	1
RACEID	RACEID	*****
TESTERID	0 TESTER ID NUMBER	ZZ124-William Morrison
ATSTTYPE	0 TYPE OF TEST	sales
AAPPTYPE	0 TYPE OF APPROACH	Call for appointment
ADATEV	DATE OF VISIT (mm/dd/yy)	
ATIMEV	Time (_ _ : _ _)	
ATIMEVM	A.M. P.M. for time of visit	
header9	TEST SITE	
PPNAME	1 Name of Test site (if known)	*****
header11	Site Address	
PADDRS	2 street	*****
PCITY	2 city	*****
PSTATE	2 state	*****
PZIP	2 ZIP 00000	*****
Head171	Telephone number(s) of test site:	
PPHN1	3 First Number (000)000-0000	*****
PPHN2	3 Second Number: (000)000-0000	*****
header20	SOURCE OF INFORMATION ON TEST SITE	
SRCENAME	4 Advertisement: Name of source	Milwaukee Journal Sentinel
ADDATE	5 Advertisement: Date of Publication (mm/dd/yy)	6/10/01
ADTEXT	6 Advertisement: text of ad	GERMANTOWN Prime location N102W14738 Providence Ct. 4BR, 2.5BA, 2 story on cul de sac, 3/4 ac landscaped lot.

		1996. 3000+ sq ft. FT, 1st floor utility, deck, office, large master suite, \$339,900. 262-253-0961.	
header24	TYPE OF HOUSING TO BE REQUESTED		
PBEDS	7 Number of Bedrooms to be requested	4	
PMINBED	7a Minimum number of bedrooms for household	2	
PHMTYPS	8 Type of home (SALES only)	Single Family	
PHMTYPR	9 Type of unit (RENTAL only)	-1	
PHNEED	10 Date Housing is Needed (mm/dd/yy)		
PHMPRI	Home price	*****	
PHHCOMP	8 Household Composition	Married Couple, 2 Children (Same Gender)	
APRIR	11 Price Range [Tester may look at units for LESS than this range as well] (For RENTAL Only)		
APREFER	Area Preference (IMPORTANT: DO NOT CITE A NEIGHBORHOOD PREFERENCE)		
AAREAP	12 If you are pressed by the agent, you may state that you are looking in	Milwaukee and surrounding suburbs	
header33	Remember: You are always open to considering any areas recommended by the agent.		
AMOVERR	13 Reason for Moving (Rental Tests)		
AMOVERS	13 Reason for moving (Sales Tests)	Seems like a good time to buy	
AHEAD55	Other places visited: Just started looking		
header36	ASSIGNED CHARACTERISTICS		
TFNAME	15 Tester Name:	Bill Morrison	
header38	Tester Address		
TFADD1	16 Tester Address	1620 Wisconsin Ave.	

TFADD2	16 Tester Address (city/state/zip)	Apt. #42				
TVPHONE	16 Voice Mail Number Assigned to Tester (000)000-0000	(414)555-0000				
header42	Information on Persons in Household					
ARACE1	18 Tester's race	Black				
TSEX	18 Tester's gender	Male				
AAGE1	18 Tester's age	39				
TH01	Household Income	Gross Monthly Income	Gross Annual Income			
AINCMON1	18 Tester	6730	80750			
AINCMON2	18 Spouse	5045	60550			
AINCMONT	18 Total for Household	11775	141300			
TABH11	Other persons in household	Relationship	Name	Sex	Age	
ARELATE2	18 Person 2	Spouse	Barbara	Female	32	
ARELATE3	18 Person 3	Child	William	Male	6	
ARELATE4	18 Person 4	Child	David	Male	2	
ARELATE5	18 Person 5			Female	-1	
header73	Employment Information					
AOCC1	19 Tester current occupation	District Manager				
AEMP1	19 Name of tester's current employer	Marriott Services				
AEAD11	19 First line of tester's employer's address	64th Street				
AEAD12	19 Second line of tester's employer's address	Wauwatosa				
AELNG1	19 Length of employment at current job	5 years				
AOCC2	19 Tester previous occupation	Sales Representative				
AEMP2	Name of tester's previous employer	Holiday Inn				
AEAD21	19 First line of tester's previous employer's address	3rd Street				
AEAD22	19 Second line of tester's previous	South				

	employer's address	Milwaukee
AELNG2	19 Length of employment at previous job	4 years
ASOCC1	19 Spouse's occupation at current job	Database Administrator
ASEMP1	19 Name of spouse's current employer	Children's Medical Center
ASEAD11	19 First line of spouse's employer's address	Good Hope Rd.
ASEAD12	19 Second line of spouse's employer's address	Milwaukee
ASELNG1	19 Spouse's length of employment at current job	4 years
ASOCC2	19 Spouse's occupation at previous job	Computer Programmer
ASEMP2	Name of spouse's previous employer	University of WI
ASEAD21	19 First line of spouse's previous employer's address	Milwaukee
ASEAD22	19 Second line of spouse's previous employer's address	
header94	Household Assets	

TH31		Financial Institution	Balance
ASAVINST	20 Savings Account	First Bank	35750
ACHKINST	20 Checking Account	First Bank	4850
AOTRINST	20 Other asset		-1
ATOTASST	20 Total Assets	40600	
header10	Household Debts		

TABH21	Creditors	Name	Type of account	Monthly payment	Balance owed
ACRDNAM1	21 Creditor 1	GMAC	Car loan	566	8690
ACRDNAM2	21 Creditor 2	Citibank Visa	Credit Card	309	7720
ACRDNAM3	21 Creditor 3	Citibank Master Card	Credit Card	56	1740

ACRDNAM4	21 Creditor 4	Macy's	Credit Card	34	1160
ACRDNAM5	21 Creditor 5			0	0
ACRDNAM6	21 Creditor 6			0	0
ACRDNAM7	21 Creditor 7			0	0
ACRDMONT	21 Total monthly payments on all debts	965			
ACRDBALT	21 Total balance owed on all debts	19300			
AHEAD21	Credit standing: Excellent, no late payments				
header13	CURRENT HOUSING SITUATION				
AHEAD31	Type of current housing: Rent				
ARENTNOW	24 Amount of Current Rent	3000			
ALGNCUR	25 Years at Current Residence	4 years			
ALEASETP	26 Type of Rental Agreement at Current Residence	Month-to-Month			
AHEAD61	History of rent payment at current residence: Always on time				
AHEAD62	Other characteristics: Non-smoking, No pets				
ADSITE	28 Directions to the Test Site	Get directions at time of appointment call			
RELEASE	Test Released	Yes			

INSTRUCTIONS FOR ALL HDS SITE VISITS - SALES

- If you made an appointment prior to this visit, please ask to speak with the person with whom you made the appointment to meet. If you are dropping in without an appointment on this site visit, please ask to speak with a sales agent. Express interest in and ask to view the housing that was advertised for sale.
- Ask the agent to recommend other homes that have the same number of bedrooms as the advertised housing. Express interest in and ask to view any homes that are recommended by the agent provided that they have the same number of bedrooms as the advertised home or at least the minimum number of bedrooms for your household.
- After viewing the advertised home, try to arrange to spend three hours looking at additional homes that are recommended by the agent. If, on the day of your initial site visit, the agent is unavailable or unable to show you the advertised home and/or other recommended homes, let the agent know that you would like to spend some time (e.g. a few hours, several hours, etc.) on another day viewing additional homes.
- If, in response to your request that the agent recommend some homes to view, the agent presents you with a long list of homes available for sale, please ask the agent to select homes to show you so that you can begin to get an idea of what is available. If the agent refuses to pick out any homes on the list and insists that you make the selections, please tell the agent that you would like to take the list of homes with you so that you can spend some time looking it over. NEVER select the homes to view.
- Please remember to obtain information about the exact address of each property that is recommended by the agent, including the number of bedrooms, current asking price, number of bathrooms, and other features and amenities, if this information is not provided by the end of your visit.
- If the agent, someone in the agent's office, or someone the agent calls while you are in the office, requests that you provide detailed personal and financial information about your income, debts, assets, etc. in order to help you figure out what price range of housing that you can afford, please provide this information exactly as it appears on your assignment form. Do not, UNDER ANY CIRCUMSTANCES, provide your date of birth, social security number, or authorize anyone to conduct a credit check. If anyone asks about your credit standing or requests that a credit check be conducted, offer to characterize your credit as it appears on your assignment form. If you are provided with an estimated price range or with an estimated mortgage amount for which you might qualify, please remember to include this information in your notes.
- If you are provided more detailed information about financing options, be sure to write down the information that is offered (e.g. type of financing, interest rates, down payment requirements, etc.). Also, if the agent refers you to a lender or mortgage broker for further assistance with financing, please remember to include this information in your notes.
- Lastly, if by the end of your visit the agent has not volunteered his or her name, please ask for it.

APPOINTMENT CALL FORM

(ALL CONTACTS WITH AGENT MADE **PRIOR** TO ANY SITE VISIT SHOULD BE RECORDED ON AN APPOINTMENT CALL FORM. COMPLETE ONE FORM FOR EACH CALL ATTEMPTED BY TESTER OR RECEIVED FROM AGENT.)

Control # ____ - ____ - ____ - 3 Phone Number (s) (_____) _____ ; (_____) _____	Tester ID # ____ - ____ - ____
Day of the Week: _____ Date ____ / ____ / ____ Time ____ : ____ <input type="checkbox"/> AM <input type="checkbox"/> PM Call was Initiated by: <input type="checkbox"/> Tester (Go to Q1) <input type="checkbox"/> Agent (Go to Q7)	
<p>1. Was the Appointment Call Completed?</p> <p><input type="checkbox"/> Yes (check one box below)</p> <ul style="list-style-type: none"><input type="checkbox"/> Appointment / Site Visit Arrangements made (Go to Q2)<input type="checkbox"/> Appointment not made (check one box below)<ul style="list-style-type: none"><input type="checkbox"/> Agent will not make an appointment (Why not? _____)<input type="checkbox"/> No housing is available<input type="checkbox"/> Other (specify): _____<input type="checkbox"/> Test terminated by Test Coordinator <p><input type="checkbox"/> No (check one box below)</p> <ul style="list-style-type: none"><input type="checkbox"/> Left message on voice mail, pager, etc.<input type="checkbox"/> Left message with person<input type="checkbox"/> Told to call back later<input type="checkbox"/> Wrong number<input type="checkbox"/> No Answer<input type="checkbox"/> Telephone number no longer in service<input type="checkbox"/> Other (specify): _____<input type="checkbox"/> Test terminated by Test Coordinator	
<p>2. When is your site visit scheduled for?</p> <p>Day of the Week _____</p> <p>Date ____ / ____ / ____</p> <p>Time ____ : ____ <input type="checkbox"/> AM <input type="checkbox"/> PM</p> <p>3. Name of person you have arranged to meet with: _____</p> <p>4. Location to meet: _____</p> <p>5. Name of person you spoke with during this contact: _____</p> <p>6. Comments made: _____</p>	
<p>FOR AGENT INITIATED CALL:</p> <p>7. Call was Received By: <input type="checkbox"/> Tester <input type="checkbox"/> Test Coordinator</p> <p>7a. What was the Purpose of the Agent's Call?</p> <ul style="list-style-type: none"><input type="checkbox"/> Agent called to confirm appointment time<input type="checkbox"/> Agent called to cancel appointment and reschedule<input type="checkbox"/> Agent called to cancel appointment, but did not reschedule<input type="checkbox"/> Other (specify): _____	

7. Were you able to meet with an agent to discuss housing options?

Yes

No

7a. If No, why not? _____

(Note: If No, STOP here, do not complete the rest of the form)

8. How many minutes did you wait to meet with someone (i.e. between the time you were greeted by someone when you entered and the time you met with the agent)?

_____ minutes

9. When you asked the agent about the availability of the rental housing that was advertised, what were you told [*check only ONE box*]?

The advertised rental housing is available when I need it.

The advertised rental housing is NOT available when I need it.

The agent did not know whether the advertised rental housing was available.

Something else (*specify*): _____

10. Did the agent tell you that any "similar" rental housing was available?

[*"Similar" rental housing has the **same** number of bedrooms as the advertised housing, is in your price range, and is available when you need it.*]

Yes

No

10a. If Yes, how many "similar" rental housing units did the agent tell you about? _____ units

11. Did the agent tell you that any "other" rental housing was available?

[*"Other" rental housing has **at least** the minimum number of bedrooms for your household, is in your price range, and is available when you need it. "Other" rental housing also includes housing with a greater number of bedrooms than the rental housing.*]

Yes

No

11a. If Yes, how many "other" rental housing units did the agent tell you about? _____ units

12. How many **TOTAL** rental housing units did the agent tell you were available?

(*Note: Add rental housing units from Questions 9 [if you answered that the advertised rental housing was available], 10a and 11a.*) _____ units

13. During your visit, did the agent comment on or make reference to any of the following: Fair Housing Laws, Equal Housing Opportunity, Open Housing Ordinance, or Anti-discrimination Laws?

Yes

No

13a. If Yes, what was the comment or reference?

14. Did the agent tell you that an application form of some kind must be completed before renting a unit?

Yes

No

14a. Did the agent ask you to complete an application during your visit or give you an application to take with you?

Yes

No

14b. Did the agent tell you that a credit check was part of the application process?

Yes

No

14c. Did the agent tell you that a criminal background check was part of the application process?

Yes

No

15. Complete the grid below regarding any of your qualifications to rent that were requested by the agent. (*check only one per line*)

Qualification	I volunteered	Agent Requested	Exchanged in earlier phone call	Agent did not obtain
a. Your marital status				
b. Your family size				
c. Your income				
d. Your spouse's income				
e. Your occupation				
f. Your spouse's occupation				
g. Your length of employment				
h. Your spouse's length of employment				
i. Your credit standing				
j. Your rent history				
k. Your address/phone number				
l. Other:				

16. Did the agent make any remarks about race or ethnicity that were not associated with neighborhoods in which the available rental housing was located?

Yes

No

16a. If Yes, please record what the agent said: _____

17. Did the agent make any remarks about religion, persons with disabilities, or families with children?

Yes

No

17a. If Yes, please record what the agent said: _____

18. Did the agent provide you with any of the following items THAT YOU DID NOT ASK FOR? (Check all that apply.)

Business card

Brochure

Floor plan

Listing of available units

Lease/Rental Agreement

Gift

Other (*specify*): _____

19. What arrangements were made regarding future contact between you and the agent [*check all that apply*]?

The agent said that he/she would contact you

The agent invited you to call him/her

Future arrangements were not made

Other (*specify*): _____

20. When was this report completed?

Date (month/day/year): ____/____/____

Day of Week _____

Time ____:____ AM PM

AVAILABLE RENTAL UNIT

Complete one form for each unit that you were told about and that met your needs

CONTROL # ____ - ____ - ____ - 3

TESTER ID# ____ -

1. Address:

(number)

(street)

(unit #)

(city)

(state)

(zip)

1a. Type of Building

- ☐ Apartment Building - 4 or Fewer Units
☐ Single-Family Home

- ☐ Apartment Building - 5 or More Units
☐ Mobile Home

Basic Information

2. Is this the advertised unit? ☐ Yes ☐ No ☐ Not Sure

3. What did you inspect?

- ☐ Actual available unit
☐ Model similar to the actual available unit (*Do Not Answer Question 12*)
☐ Other unit similar to the actual available unit (e.g., manager's unit, recently rented unit, etc.) (*Do Not Answer Question 12*)
☐ Nothing (*Do Not Answer Question 12*)

4. Date Available ____ / ____ / ____

5. How much is the rent? \$ ____ / month

5a. Did the agent inform you that the rent was in any way negotiable? ☐ Yes ☐ No

5b. If Yes, please describe:

6. Number of bedrooms

7. Number of bathrooms _____

8. How many floors in building? _____

9. Unit is on what floor? _____

10. Length of Lease? [check all that apply]

- ☐ Month-to-month
☐ Three month
☐ Six month
☐ One year
☐ Two year
☐ Other (specify: _____)

12. How do you rate the physical condition of the unit's INTERIOR?

- ☐ Clean and in excellent repair, move in condition
☐ Some cleaning and minor maintenance needed; adequate

- ☐ Very dirty and in need of substantial maintenance; serious problems
☐ Not applicable (did not view interior of actual unit or unit was a model/example)

13. How do you rate the physical condition of the building's EXTERIOR?

- ☐ Clean and in excellent repair, move in condition
☐ Some cleaning and minor maintenance needed; adequate
☐ Very dirty and in need of substantial maintenance; serious problems
☐ Not applicable (did not view exterior)

14. Did the agent know what utilities were included in the rent?

- ☐ Yes ☐ No

14a. If Yes, what utilities did the agent say were included in the rent (check all that apply)?

- ☐ Electric
☐ Gas
☐ Water
☐ Partial Utilities [i.e., extra for seasonal heating/cooling]
☐ Other Utilities (specify: _____)

15. What building/complex amenities did the agent show you (check all that apply)?

- | | |
|--|---|
| <input type="checkbox"/> Parking area/garage | <input type="checkbox"/> Hiking trails |
| <input type="checkbox"/> Laundry facility | <input type="checkbox"/> Mail Room |
| <input type="checkbox"/> Exercise Room/Health Club | <input type="checkbox"/> Trash/Recycling Area |
| <input type="checkbox"/> Storage area | <input type="checkbox"/> Picnic/Barbeque Area |
| <input type="checkbox"/> Sauna/Whirlpool | <input type="checkbox"/> Basketball Court |
| <input type="checkbox"/> Playground/Play Area | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Pool | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Tennis/Racquetball Courts | <input type="checkbox"/> Other _____ |

Fees

16. Specify any fees that you were told would be required AT THE TIME OF APPLICATION.

Name/Purpose of Fee

Amount of Fee

(e.g., Credit Check, Cleaning Fee, Application Processing fee, etc.)

_____	\$
_____	\$
_____	\$
_____	\$
<i>Total Amount Required with Application</i>	<u>\$</u>

16a. Did the agent inform you that any of the fees listed above were in any way negotiable?

- ☐ Yes ☐ No If Yes, please describe:

Security Deposit

17. Is a security deposit required? ☐ Yes ☐ No ☐ Agent did not know
- 17a. If Yes, how much is it? \$ _____
- 17b. Did the agent inform you that any part of the security deposit was negotiable? ☐ Yes ☐ No
If Yes, please describe:
- _____

Waiting List

18. Did the agent tell you that there were any applicants who would be considered for renting this unit *before* you would be considered? ☐ Yes ☐ No
If Yes, please describe what you were told:
- _____

- 18a. Were you told that there was a waiting list for this unit? ☐ Yes ☐ No
- 18b. If Yes, how many people were you told were on the list?
- 18c. If Yes, did the agent offer to place your name on the list: ☐ Yes ☐ No

Financial Incentives / Specials

19. Did the agent inform you that you might be able to take advantage of any financial incentives or specials if you decided to apply for and rent this unit? ☐ Yes ☐ No

- 19a. If Yes, record these incentives or specials and provide their approximate value:

Type of Incentive/Special (e.g., first month's rent free, discounted or free parking or health club membership, application fee waived, etc.)

Value (indicate monthly or annual)

_____	\$ _____	<input type="checkbox"/> Monthly (how many months? _____) <input type="checkbox"/> Annual
_____	\$ _____	<input type="checkbox"/> Monthly (how many months? _____) <input type="checkbox"/> Annual
_____	\$ _____	<input type="checkbox"/> Monthly (how many months? _____) <input type="checkbox"/> Annual
_____	\$ _____	<input type="checkbox"/> Monthly (how many months? _____) <input type="checkbox"/> Annual
_____	\$ _____	<input type="checkbox"/> Monthly (how many months? _____) <input type="checkbox"/> Annual

Total Value of Incentive / Special \$ _____

Other Buildings/Complexes

20. Did the agent suggest that you consider a different rental building or complex than the one that this unit is located in? ☐ Yes
☐ No

If Yes, was that building or complex managed by the same company?

☐ Yes ☐ No ☐ Don't Know

21. **Did the agent make any of the following comments about the surrounding neighborhood?**

a. Noise

☐ Quiet

☐ Noisy

☐ No comment

b. Safety

☐ Safe/low crime

☐ Dangerous/high crime

☐ No comment

c. Schools

☐ Good

☐ Poor

☐ No comment

d. Maintenance/ Services

☐ Good Services/Amenities

☐ Poor Services/Amenities

☐ No comment

e. Race or Ethnicity? ☐ Yes ☐ No

If **Yes**, please record what the agent said:

HOUSING DISCRIMINATION STUDY SITE VISIT REPORT FORM - SALES

CONTROL #: ____ - ____ - ____ - 3 **TESTER ID NUMBER:** ____ - ____ - ____

1. Location of Office:

Firm Name (if applicable): _____

Office/Room Number: _____

Address: _____

(number)

(street)

(city)

(state)

(zip)

2. Date and Time of Site Visit:

Date (month/day/year): ____/____/____ Day of Week: _____

Appointment Time: ____:____ AM PM

2a. Time began (office arrival): ____:____ AM PM

Time ended (departure): ____:____ AM PM

3. Is this your second site visit?

Yes

No

4. Information on persons with whom you had contact during your visit

[check responses where appropriate]:

Name/ Position	Race/Ethnicity (check one box)							Gender		Age Group				Primary Person Who Provided Info
	W=White B=Black H=Hispanic A=Asian/ Pacific Islander	I=American Indian O=Other DK=Don't Know												
	W	B	H	A	I	O	DK	M	F	18- 30	31- 45	46- 65	65 +	
1. Name: _____ Position: _____														
2. Name: _____ Position: _____														
3. Name: _____ Position: _____														
4. Name: _____ Position: _____														
5. Name: _____ Position: _____														

5. Were you able to meet with an agent today to discuss housing options?

Yes

No

5a. If Yes, where did you meet?

Agent's office

Somewhere else (specify):

5b. If No, why not? (specify):

(Note: If No, STOP here and do not complete the rest of the form)

6. Did the agent decline to meet with you today?

Yes

No

7. How many minutes did you wait to meet with someone (i.e. between the time you were greeted by someone at the firm when you entered and the time you met with the agent)?

_____ minutes

8. When you asked the agent about the availability of the advertised home, what were you told?

[Check only ONE box]

Home is available.

Home is available, but the agent recommended that I not consider it.

Home is not available.

The agent did not know the status of the house.

Something else (specify): _____

9. Did the agent recommend any other homes that had the same number of bedrooms as the advertised home?

Yes

No

9a. If Yes, how many homes with the same number of bedrooms did the agent recommend?

(Do not include advertised home) _____ Homes

10a. Did the agent recommend any other homes that had a different number of bedrooms than the advertised home?

[Other homes must have **at least** the minimum number of bedrooms for your household and can include homes with a greater number of bedrooms than the advertised home.]

Yes

No

10a. If Yes, how many homes with a different number of bedrooms than the advertised home did the agent recommend? _____ Homes

11. How many TOTAL homes did the agent recommend, **including** the advertised home?: _____
(Add units from Questions 7 [if you answered "Home is available"], 8a, and 9a).

12. How many homes did the agent offer for your review in a listing or other format (i.e., these homes were NOT SPECIFICALLY RECOMMENDED)? _____ Homes

13. During your visit, did the agent comment on or make reference to any of the following: Fair Housing Laws, Equal Housing Opportunity, Open Housing Ordinance, or Anti-discrimination Law?

Yes

No

13a. If Yes, what was the comment or reference?

14. Based on your observations and the remarks of the agent, indicate below the sources used to select properties for your review: *[check all that apply]*

Multiple listings book(s)

Home seeker guides/magazines

Computer

Internet website - (specify): _____

Other printed sheet

File cards

Scraps of paper

Other (specify): _____

None

15. At any time during your visit, did the agent refer you to another real estate agent for assistance in buying a home?

Yes

No

15a. If Yes, did this other agent work for the same real estate agency?

Yes

No

16. Was the agent's role described to you as being one of the following:

- Buyer's agent
- Seller's agent
- Dual agent
- Did not disclose

17. Were you *asked* to sign any agreements or documents?

- Yes
- No

17a. If Yes, please specify each below:

	Document Name	Purpose	Did you sign?	
1.			Yes	No
2.			Yes	No
3.			Yes	No
4.			Yes	No

18. Did the agent ask if you had already visited a lender or been pre-qualified for financing?

- Yes
- No

19. Did the agent refuse to provide any of the following services unless you were pre-qualified by a lender (i.e., not during this site visit)?

- | | | |
|--|-----|----|
| Agent could not tell me about the advertised home | Yes | No |
| Agent could not recommend any homes to me | Yes | No |
| Agent could not provide me with any listings | Yes | No |
| Agent could not show me any homes | Yes | No |
| Agent would show me only the advertised home, but no others | Yes | No |
| Agent would not make a second site visit appointment with me | Yes | No |

20. Complete the grid below regarding any of your qualifications to purchase a house that were requested by the agent at any point. *(Check only one per line)*

Qualification	I volunteered	Agent Requested	Obtained in earlier phone call	Agent did not obtain
a. Your marital status				
b. Your family size				
c. Your income				
d. Your spouse's income				
e. Your occupation				
f. Your spouse's occupation				
g. Your length of employment				
h. Your spouse's length of employment				
i. Your savings/assets (e.g. funds available for downpayment, closing costs, etc.)				
j. Your debts				
k. Credit Standing				
l. Reason for moving				
m. Geographic preference				
n. Your address/phone number				
o. Your current housing situation (rent/own)				
p. Other:				

21. Did the agent tell you that you were not qualified to be a homebuyer at this time?

Yes

No

22. Did the agent volunteer to help you find financing?

Yes

No

23. Did the agent suggest one or more mortgage companies, lenders, or brokers?

Yes

No

23a. If Yes, please list them below:

	Mortgage Company/Firm	Lender/Broker Name	City	Telephone
1.				
2.				
3.				
4.				

24. Did the agent discuss the type of financing that might be available to you?

Yes

No

24a. If Yes, please indicate which types of financing the agent discussed or mentioned by filling out the grid below: [check one per line]

	Agent Discussed	Agent did not mention
a. Conventional Fixed Rate Financing (non FHA)		
b. Conventional Adjustable Rate Financing (ARM)		
c. FHA or VA Financing		
d. Other government financing (state or local) (specify): _____		
e. Other (specify): _____		

25. During the visit, did anyone pre-qualify you or calculate for an estimated home price or loan amount for which you could qualify using your specific financial information (e.g., income, debts, and assets)?

Yes

No

25a. If Yes, using the numbers from Question 4, enter the number of the person who provided you with the information on the amount of financing you could afford: [enter line #]

25b. If Yes, was this person?

The agent who was providing housing information to you

An in-house mortgage specialist

A lender by telephone

Someone else

26. Home Price:

Did the agent suggest a house price or price range for which you might qualify?

Yes

No

26a. If Yes, what was the home price range?

\$ _____ (lowest) \$ _____ (highest)

27. Loan/Mortgage Amount:

Did the agent suggest a mortgage amount (\$ borrowed) or range for which you might qualify?

Yes

No

27a. If Yes, what was the loan amount range?

\$ _____ (lowest) \$ _____ (highest)

28. Interest Rates:

Did the agent mention interest rates for mortgage loans?

Yes

No

28a. If Yes, what were the interest rates mentioned?

_____ % (lowest) _____ % (highest)

29. Monthly Payments:

Did the agent mention monthly payments for a mortgage loan?

Yes

No

29a. If Yes, what were the monthly payments?

\$ _____ (lowest) \$ _____ (highest)

30. Downpayment:

Did the agent mention the likely downpayment on a house?

Yes

No

30a. If Yes, what was the downpayment amount or percentage?

Downpayment Amount: \$ _____ (lowest) \$ _____ (highest)

Downpayment Percent: _____ % (lowest) _____ % (highest)

31. Did the agent discuss any of the following with you? [check all that apply]

Paying down debts

Debt consolidation

Downpayment assistance (gift, special program)

Co-signer

Seller assistance

Pre-qualification letter

None of the above were discussed

31a. For any items discussed, please describe what you were told:

32. Did the agent discuss or make any comments about specific neighborhoods or geographic areas that were not associated with any recommended homes? (If yes, fill out a Neighborhood Information Form.)

Yes

No

33. Did the agent make any remarks about race or ethnicity that were not associated with any particular home or neighborhood?

Yes

No

33a. If Yes, please record what the agent said: _____

34. Did the agent make any remarks about religion, persons with disabilities, or families with children?

Yes

No

34a. If Yes, please record what the agent said: _____

35. Did the agent provide you with any of the following items THAT YOU DID NOT ASK FOR?
(Check all that apply)

Business card

Brochure

Listings

Homebuying Guide/Video

Financing Information

Financing Worksheet

Mortgage Calculator

Gift

Other (specify): _____

36. What arrangements were made regarding future contact between you and the agent?
(Check all that apply)

The agent said that he/she would contact you

The agent invited you to call him/her

Arrangements for future contact were not made

Other (specify): _____

37. When was this report completed?

Date (month/day/year): ____/____/____

Day of Week _____

Time ____:____ AM PM

RECOMMENDED HOME

(Complete one form for each home recommended and/or inspected)

CONTROL # ____ - ____ - ____ - 2

TESTER ID# ____ - ____ - ____

1. Full Address of Home

(number) _____ (street) _____ (unit) _____
(city or town) _____ (state) _____ (zip code) _____

2. Basic Information

- a. Is this the advertised home? ☐ Yes ☐ No
b. Did you inspect the home? ☐ Yes ☐ No
c. How many bedrooms were in the home? _____
d. What was the current asking price? _____

3. What type of building is it?

- ☐ Single-family detached
☐ Duplex
☐ Rowhouse or Townhouse
☐ Multi-family structure
☐ Mobile home

4. Is this a newly built home that has never been occupied?

- ☐ Yes
☐ No

5. How do you rate the physical condition of the home's INTERIOR?

- ☐ Clean and in excellent repair, move-in condition
☐ Some cleaning and minor maintenance needed, adequate
☐ Very dirty and in need of substantial maintenance, serious problems
☐ Not Applicable, did not view interior

6. How do you rate the physical condition of the home's EXTERIOR?

- ☐ Clean and in excellent repair, move-in condition
☐ Some cleaning and minor maintenance needed, adequate
☐ Very dirty and in need of substantial maintenance, serious problems
☐ Not Applicable, did not view exterior

7. Did the agent make any of the following comments about the surrounding neighborhood?

a. Noise

- ☐ Quiet
☐ Noisy
☐ No comment

b. Safety

- ☐ Safe/low crime
☐ Dangerous/high crime
☐ No comment

c. Schools

- ☐ Good
☐ Poor
☐ No comment

d. Investment

- ☐ Rising values/good investment
☐ Flat values/not much appreciation
☐ Declining values/depreciation
☐ No comment

e. Public Services

- ☐ Good Services/Amenities
☐ Poor Services/Amenities
☐ No comment

f. Race or ethnicity? ☐ Yes ☐ No

If Yes, please record what the agent said: _____

NEIGHBORHOOD INFORMATION

Complete one form for each neighborhood that the agent discussed with you other than those surrounding recommended and/or inspected homes.

CONTROL #: ____ - ____ - ____ - 2 **TESTER ID NUMBER:** ____ - ____ - ____

1. Name of Area: _____

2. This area is a:

- ☐ County
- ☐ Town or City
- ☐ School District
- ☐ Neighborhood
- ☐ Don't know

3. Did the agent make any of the following comments about the neighborhood?

a. *Noise*

- ☐ Quiet
- ☐ Noisy
- ☐ No comment

b. *Safety*

- ☐ Safe/low crime
- ☐ Dangerous/high crime
- ☐ No comment

c. *Schools*

- ☐ Good
- ☐ Poor
- ☐ No comment

d. *Investment*

- ☐ Rising values/good investment
- ☐ Flat values/not much appreciation
- ☐ Declining values/depreciation
- ☐ No comment

e. *Public Services*

- ☐ good services/amenities
- ☐ poor/unreliable services
- ☐ no comment

f. *Race or Ethnicity?*

- ☐ Yes
- ☐ No

If **Yes**, please record what the agent said: _____

FOLLOW-UP CONTACT FORM

X COMPLETE AT LEAST ONE FORM FOR EACH TEST
X DO NOT USE THIS FORM FOR APPOINTMENT CALLS
X TESTER: NOTIFY TEST COORDINATOR OF ANY CONTACT AND FORWARD MATERIALS RECEIVED

CONTROL #: ____ - ____ - ____ - 3

TESTER ID NUMBER: ____ - ____ - ____

1. Was there any follow-up contact?

No

Yes (if yes, complete rest of form)

2. Date and time of contact:

Day of the Week: _____

Date ____ / ____ / ____

Time ____ : ____ AM PM

3. Type of Contact

Telephone call to tester at home

Telephone message left at tester's home

Voice mail message retrieved by Test Coordinator

Postal mail

E-mail

Other [Specify]: _____

4. Name of person making contact: _____

5. Name of agency (if given): _____

6. What was the stated purpose of the contact? [check all that apply]

Agent wanted to see if tester is still interested in purchase/rental

Agent wanted to recommend a lender to the tester

Agent wanted to let tester know about more housing

Agent wanted to get more information from tester

Agent wanted to thank tester

Other [specify]: _____

7. Describe any materials received: _____

ANNEX 2: TESTS OF STATISTICAL SIGNIFICANCE

The gross measure of adverse treatment is simply an estimate of the probability that the white tester is favored over his or her minority partner, or the empirical mean of a variable (Z_{10}) that takes on the value of one if the white tester is favored and zero otherwise. In simple random samples, the standard error of the gross measure estimate is square root of the element variance of this discrete outcome divided by the sample size; the element variance of the variable is simply

$$\sigma_g^2 = E[Z_{10}^2] - E[Z_{10}]^2 = \Pr[W_{ik}=1, M_{ik}=0] (1.0 - \Pr[W_{ik}=1, M_{ik}=0])$$

where W_{ik} is a Bernoulli variable denoting a favorable outcome for the white tester (1=favorable; 0=unfavorable) and M_{ik} denotes the Bernoulli analogue for the Minority treatment outcome. Doubling the standard error yields a 95 percent confidence interval for the gross measure of adverse treatment. However, this apparently straightforward hypothesis test that the gross measure is greater than zero is not meaningful; the fact that any instances of white- or minority-favored treatment occurred in the sample of tests means (by definition) that the null hypothesis must be rejected (the probability of differential treatment in the total population cannot be equal to zero). In other words, a null hypothesis that a probability is zero is automatically rejected whenever at least one such event is observed.

The (effective) sample size for these tests is quite large, and based on the central limit theorem the 95 percent confidence interval for the gross measure is simply the estimated measure plus or minus 1.96 times the estimated standard error. This assumes that the estimated proportion is neither close to zero or one. If percentages are extreme (say, greater than 0.95 or less than 0.05), nonsymmetrical confidence intervals are calculated using formulae in Fleiss (1981) with adjustments to variance which incorporate the design effect. Also, note that the standard error cannot be used to provide a statistical test that the gross measure is greater than or equal to zero. The gross measure is the estimate of an event probability. The null hypothesis that a probability equals zero is rejected upon even a single observation of the event because if the null is true the event cannot occur.

The net measure of adverse treatment is the difference between the proportion of tests where the white is favored and the proportion where the minority is favored. For the net measure, the standard error of the estimate is based on a simple difference of means, and the variance of the net measure may be written as

$$\sigma_n^2 = \text{Var}[W_{ik}] + \text{Var}[M_{ik}] - 2 \text{Cov}[W_{ik}, M_{ik}]$$

W_{ik} and M_{ik} are both binary variables, and calculations of their variance are straightforward. The element covariance can be calculated as follows:

$$\sigma_{WM} = \Pr[W_{ik}=1, M_{ik}=1] * \Pr[W_{ik}=0, M_{ik}=0] - \Pr[W_{ik}=1, M_{ik}=0] * \Pr[W_{ik}=0, M_{ik}=1]$$

The null hypothesis that the net measure is positive and differs from zero (a one-sided test) is rejected with a 5 percent chance of a type I error or less if the net exceeds 1.65 times the estimated standard error.

Results for individual states and metropolitan areas are based on small sample sizes of approximately 70 to 120 tests per site, tenure, and ethnic group. The statistical tests described earlier could be replaced by a t-test with N-1 degrees of freedom in which N is the sample size. This test, however, requires either an assumption that the errors are distributed normally or a large enough sample size to invoke the central limit theorem, which insures normality of the mean even when errors are non-Normal. We apply the central limit theorem for the confidence intervals on the gross measure of adverse treatment. Gross adverse treatment is simply a binary or Bernoulli variable. In practice, the frequencies arising from a Bernoulli variable are approximately distributed normally when each cell contains at least five entries.

Neither the normality assumption nor the use of the central limit theorem is appropriate for the net measure of adverse treatment. For example, Heckman and Siegelman (1993) examines data from the Urban Institute employment tests and finds that the t-test for a difference of means is less likely to detect net adverse treatment against minority testers compared to more appropriate statistical tests.

Heckman and Siegelman (1993) suggest that the one-sided test for whether net adverse treatment is greater than zero can be written as simply

$$H_0: E[Y_{10} | Y_{11}=0, Y_{00}=0] \leq 0.5$$

where Y_{11} is one if $W_{ik}=1$ and $M_{ik}=1$ and Y_{00} is one if $W_{ik}=0$ and $M_{ik}=0$. This test conditions on the occurrence of either relatively favorable white or minority treatment, and tests whether the conditional likelihood of white-favored treatment is 50 percent. This test, often called the sign test, is the uniformly most powerful statistical test for this null hypothesis.

Under H_0 , the probability of observing N_2 or more tests in which the white tester receives favorable treatment and the minority tester does not is the number of permutations under this restriction divided by the total number of permutations for which N_d tests can be assigned to two outcomes.

$$\Pr[N_2 = k | N_d = N_2 + N_3] = N_d! / (2^{N_d} (N_d - k)! k!)$$

where N_3 is the number of tests in which outcome 3 is observed. The critical value (N_c) is chosen so that

$$\sum_{j=N_c}^{N_d} \text{Prob} [N_2 = j \mid N_d] \leq 0.05$$

Due to the nature of permutation tests, the sum of the probabilities will not equal 5 percent exactly. In principle, a randomization test may be conducted so that the null will be rejected with some probability if N_2 equals N_c minus one.¹ In practice, however, the probability of a type one error given the observed values is simply calculated by setting N_c equal to N_2 in the equation above.

Due to the small sample sizes for the three-part tests, we also use exact, non-parametric tests to determine the statistical significance of the net adverse treatment measures. A simple sign test can be constructed by creating a sample in which the events Y6 (W is not favored, M1 is favored, and M2 is not favored) and Y7 (W is not favored, M1 is not favored, and M2 is favored) each create one observation in which differential treatment occurs between testers of the same race and the event Y5 (W is favored, M1 is not favored, and M2 is not favored) creates two observations in which white favored treatment occurs ($Y5=1$). The resulting sign test is

$$\text{Prob}[Y5=1 \mid Y1 + Y2 + Y3 + Y4 + Y8 = 0] \leq 0.5$$

where the observations with $Y5=1$ enter the sample twice.²

¹ Heckman shows that a randomized test can be used to obtain significant tests with exactly a 5% probability of a type I error. The randomized test rejects the null hypothesis if the value of N_2 exceeds N_c , and also rejects the null hypothesis with probability α if the net measure equals the N_c minus one where the following equation holds: $\alpha p_2 + p_1 = 0.05$, p_1 the probability of a type I error implied by the cut-off of N_c , and p_2 is the increase in the probability of a type I error implied by lowering the cut-off to N_c minus 1.

² Strictly speaking this test is no longer a permutation test because the event Y5 cannot truly occur twice and the two across group comparisons in the triad test are mutually exclusive. Nonetheless, the sign test does provide a convenient non-parametric test for whether two probabilities differ from each other.